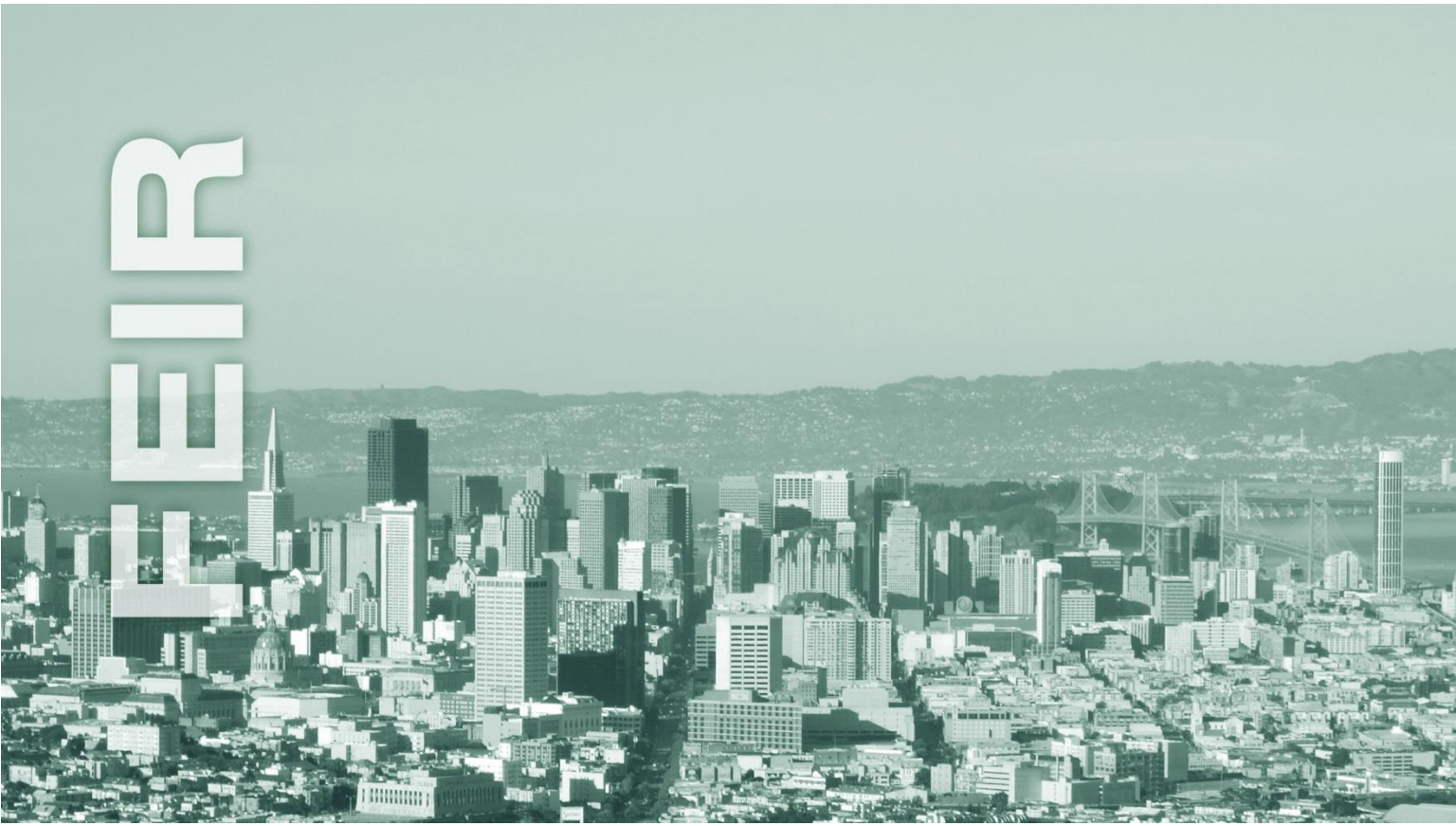


EIR



FINAL ENVIRONMENTAL IMPACT REPORT

Significant Natural Resource Areas Management Plan (Volume II)

CITY AND COUNTY OF SAN FRANCISCO
PLANNING DEPARTMENT
CASE NO. **2005.0912E**
STATE CLEARINGHOUSE NO. 2009042102



SAN FRANCISCO
PLANNING
DEPARTMENT

Draft EIR Publication Date:	AUGUST 31, 2011
Draft EIR Public Hearing Date:	OCTOBER 6, 2011
Draft EIR Public Comment Period:	AUGUST 31, 2011, to OCTOBER 17, 2011, and APRIL 27, 2012, TO JUNE 11, 2012
Final EIR Certification Hearing Date:	DECEMBER 15, 2016

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A dot (●) indicates material that has been revised since publication of the Draft EIR. Long changes are indicated with opening dots (⤵) and closing dots (⤴).



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X. RESPONSES TO COMMENTS

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RTC CHAPTER 1 Introduction

1.A PURPOSE OF THE RESPONSES TO COMMENTS DOCUMENT

This Responses to Comments (RTC) document completes the Final Environmental Impact Report (EIR), analyzing potential environmental effects associated with implementation of the Significant Natural Resource Areas Management Plan (SNRAMP)¹ by the San Francisco Recreation and Park Department (SFRPD). The San Francisco Planning Department, as lead agency responsible for administering the environmental review for projects within the City and County of San Francisco (City) as required under the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC] Sections 21000 et seq.), published a Draft EIR on August 31, 2011. The Draft EIR was subject to a 61-day public review period. Thereafter, the Planning Department issued a notice dated April 27, 2012, advising that the Planning Department would accept additional comments on the Draft EIR through June 11, 2012. The Draft EIR, together with this RTC document, will be considered by the Planning Commission in an advertised public meeting and certified as a Final EIR if deemed adequate. Only after certification of a Final EIR may the San Francisco Recreation & Park Commission consider approval of the proposed project.

The Draft EIR together with this RTC document constitute the Final EIR for the proposed project in fulfillment of CEQA requirements and consistent with CEQA Guidelines Section 15132. This RTC document contains a summary of all comments, the City's responses to comments, copies of the letters received, a transcript of the public hearing, and revisions to the Draft EIR to clarify or correct information in the Draft EIR. Refer to RTC Section 1.C, Document Organization, p. 1-4, for a description of the overall content and organization of this RTC document.

The Final EIR has been prepared in compliance with CEQA, the CEQA Guidelines (Title 14, California Code of Regulations [CCR] Chapter 3, Guidelines for Implementation of the California Environmental Quality Act), and San Francisco Administrative Code Chapter 31. It is an informational document for use by (1) government agencies (other than the City) and the public to aid in the planning and decision-making process by disclosing the physical environmental effects of the project and identifying possible ways of reducing or avoiding potentially significant impacts; and (2) the San Francisco Recreation & Park Commission to make a decision to approve, disapprove, or modify the proposed SNRAMP project. If the San Francisco Recreation & Park Commission approves the proposed project, it will be required to adopt CEQA findings and a Mitigation Monitoring and Reporting Program (MMRP) to ensure that mitigation measures identified in the

¹ The Significant Natural Resource Areas Management Plan, or SNRAMP, is now referred to as the Natural Resources Management Plan; however, to maintain consistency between the Draft EIR and the RTC document, the term SNRAMP will continue to be used.

Final EIR will be implemented. Refer to RTC Section 1.B, Environmental Review Process, p. 1-2, for further description of the environmental review process. This document has been prepared in compliance with the requirements of CEQA. Consistent with CEQA, responses to comments are focused on providing clarification to the description of the proposed project, an adequate and accurate analysis of the physical environmental impacts of the proposed project, identification of appropriate mitigation measures and alternatives to the proposed project (i.e., physical impacts or changes to the environment attributable to the project rather than social or financial implications of the project).

Consistent with CEQA Guidelines Section 15064(e), economic and social changes caused by a proposed project are not themselves treated as significant effects on the environment. However where a physical change in the environment is caused by an economic or social impact of a project, that physical change may be regarded as a significant impact on the environment in the same manner as any other physical change caused by the project. Alternatively, economic and social effects of a physical change may be used to determine that the physical change is a significant effect on the environment. If the physical change causes adverse economic or social effects on people, those adverse effects may be used as a factor in determining whether the physical change is significant. For example, if a project would cause overcrowding of a public facility and the overcrowding causes an adverse effect on people, the overcrowding would be regarded as a significant effect. Therefore, to the extent that comments pertaining to the socioeconomic impact of the proposed project results in physical environmental impacts, this document provides a thorough response.

1.B ENVIRONMENTAL REVIEW PROCESS

As described in the Draft EIR, the San Francisco Planning Department sent a Notice of Preparation (NOP) and Initial Study to more than 2,400 interested parties on April 22, 2009, including the California Office of Planning and Research (OPR, or State Clearinghouse), other governmental agencies, organizations and persons interested in the proposed projects. On that date, an environmental review notice associated with the NOP was published in the *San Francisco Examiner* and *Pacifica Tribune*. During a 30-day public scoping period that ended on May 26, 2009, the Planning Department accepted comments from agencies and interested parties identifying environmental issues that should be addressed in the EIR. The comment letters received in response to the NOP are available for review at the San Francisco Planning Department as part of the file for Case No. 2005.0912E. A summary of comment letters received in response to the NOP is included in Draft EIR Appendix A. In addition, two public scoping meetings were held (May 12, 2009, in the County Fair Building Auditorium in Golden Gate Park, and on May 14, 2009, at the Pedro Point Firehouse in Pacifica) to receive oral comments on the scope of the EIR. The Planning Department has considered the comments made by the public and agencies in preparing the EIR for the proposed project.

The Draft EIR was first published on August 31, 2011, and circulated to local, state, and federal agencies and to interested organizations and individuals for a 45-day public review period that was later extended for two weeks by the San Francisco Planning Commission, resulting in a 61-day public review period that began August 31, 2011, and continued through October 31, 2011. In addition, the Planning Commission held a public hearing on the Draft EIR on October 6, 2011, and Commissioners, organizations, and individuals made oral comments at that hearing. A second public review comment period, during which written comments were once again invited, was provided from April 27, 2012, to June 11, 2012, for a total of an additional 46 days. A Public Notice of the additional comment period was sent to over 300 neighborhood organizations and individuals through direct mailing and was also posted in the following locations: SFRPD's McLaren Lodge, the Planning Department, and the San Francisco County Clerk's office. Between the two public review periods, a total of 107 days were available to provide written public comment.

Paper copies of the Draft EIR were made available for public review at the following locations: (1) San Francisco Planning Department, 1660 Mission Street, 1st Floor, Planning Information Counter, San Francisco, California; and (2) San Francisco Main Library, 100 Larkin Street, San Francisco, California. The documents referenced in the EIR were also available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA 94103.

On August 31, 2011, the Planning Department also distributed notices of availability of the Draft EIR, published notification of its availability in newspapers of general circulation in San Francisco (*San Francisco Chronicle*) and in *Pacifica (Pacifica Tribute)*, and posted a notice at the Planning Department office and at SFRPD's McLaren Lodge, San Francisco, California. On October 6, 2011, the San Francisco Planning Commission conducted a public hearing to receive oral comments on the Draft EIR at the San Francisco City Hall, 1 Dr. Carlton B. Goodlett Place, Room 400. A court reporter present at the public hearing transcribed oral comments verbatim and prepared a written transcript; Attachment C, Draft EIR Hearing Transcript, of this RTC document contains a copy of the public hearing transcript. A public hearing before the Historic Preservation Commission (HPC) on the Draft EIR was held on September 20, 2011. The HPC transmitted written comments to the Planning Department on September 26, 2011. This RTC also provides a response to those comments. (The HPC comment letter is included in Attachment B, Draft EIR Comment Letters.)

During the Draft EIR public review period, including the extended period from April 27, 2012, through June 11, 2012, the Planning Department received a total of 308 comment letters from approximately 289 commenters, including seven public agencies, 31 nongovernmental organizations, and 251 individuals. Comments were received by email, facsimiles, mail, or hand delivery. In addition, 199 persons submitted a signed form letter. Oral testimony was also provided from 19 individuals at the October 6, 2011, Planning Commission hearing. RTC Chapter 3, List of Persons Commenting, p. 3-1, contains a complete list of persons commenting on the Draft EIR.

During the two public comment periods on the Draft EIR, which ended on June 11, 2012, the Planning Department received over 2,400 comments. This high volume of comments required extensive time to prepare adequate responses and to update or revise the text of the SNRAMP Draft EIR, where required. Contracting issues also contributed to the time required to prepare this RTC document.

The San Francisco Planning Department distributed this RTC document for review to the San Francisco Planning Commission, as well as to the agencies, organizations, and persons who commented on the Draft EIR. In compliance with CEQA requirements, the Planning Commission will hold a public hearing to consider the adequacy of the Final EIR (Draft EIR and the RTC document). If the Planning Commission finds that the Final EIR complies with CEQA requirements, it will certify the Final EIR. Following certification of the Final EIR, the Recreation & Park Commission will review and consider the certified Final EIR and the associated MMRP before making a decision and taking an approval action on the proposed project. Consistent with CEQA Guidelines Section 15097, the MMRP is a program designed to ensure that the mitigation measures identified in the Final EIR and adopted by decision makers to mitigate or avoid the project's significant environmental effects are implemented. CEQA also requires the adoption of findings prior to approval of a project for which a certified EIR identifies significant environmental effects (CEQA Guidelines Sections 15091 and 15092). If the EIR identifies significant adverse impacts that cannot be mitigated to less-than-significant levels, the findings must include a statement of overriding considerations for those impacts (CEQA Guidelines Section 15093(b)) if the project is approved. The project sponsor, SFRPD, would be required to adopt the CEQA findings and an MMRP in connection with project approval.

1.C DOCUMENT ORGANIZATION

This Comments and Responses document is organized by the four major chapters listed below:

- RTC Chapter 1, Introduction
- RTC Chapter 2, Project Description Revisions
- RTC Chapter 3, List of Persons Commenting
- RTC Chapter 4, Comments and Responses
- RTC Chapter 5, Draft EIR Revisions

RTC Chapter 2, Project Description Revisions, contains refinements or clarifications to the Project Description chapter of the Draft EIR either in response to comments received during the public review period for the Draft EIR or as initiated by the SFRPD.

RTC Chapter 3, List of Persons Commenting, includes a list of persons, agencies, and organizations who submitted written comments on the Draft EIR and who testified at the Draft EIR public hearing held on October 6, 2011. The comment letters received and the public hearing transcript are

presented in Attachment B, Draft EIR Comment Letters, and Attachment C, Draft EIR Hearing Transcript, respectively.

RTC Chapter 4, Comments and Responses, presents a summary of the substantive comments received on the Draft EIR and responses to those comments. The comments and responses are organized by topic area, as presented in the Draft EIR, with general comments on the EIR grouped together at the beginning of the section. This chapter also contains refinements or clarifications to the Draft EIR in response to comments received during the public review period for the Draft EIR.

RTC Chapter 5, Draft EIR Revisions, contains all of the changes to the text of the Draft EIR that were previously identified in RTC Chapter 2, Project Description Revisions, and RTC Chapter 4, Comments and Responses. These changes are organized in the order of the Draft EIR table of contents. The proposed text changes (or text revisions) represent a refinement or clarification to the text of the EIR and are presented for informational purposes only. The changes do not result in new significant environmental impacts or substantially increase the severity of a significant impact identified in the Draft EIR, and no new mitigation measures are required. Further, none of the text changes identified in this Response to Comments document change any of the conclusions in the Draft EIR and do not constitute significant new information that requires recirculation of the Draft EIR under CEQA (California PRC Section 21092.1) or the CEQA Guidelines (14 CCR Section 15088.5).

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RTC CHAPTER 2 Project Description Revisions

2.A PROJECT DESCRIPTION REVISIONS

In response to comments received during the public review period for the Draft EIR and also as initiated by the San Francisco Recreation and Parks Department (SFRPD), the Project Description chapter of the Draft EIR for the SNRAMP Project has been refined or clarified. These changes are provided below; in addition, for those project description changes that are staff-initiated, they will be presented both in this Chapter and in Chapter 5. As part of the Sharp Park Conceptual Restoration Alternatives Report, the SFRPD proposed identified restoration alternatives that would be compatible with either a nine-hole layout at the Sharp Park Golf Course or with removal of the golf course entirely. These alternatives have been rejected because they are not compatible with the existing and planned continued 18-hole layout of the historic golf course.

For those project description changes that are in response to a comment, they will occur in this section, in response to the comment (in RTC Chapter 4, Comments and Responses, RTC p. 4-1), and in Section 5.A, Changes in Response to Comments, RTC p. 5-1. The Project Description changes are followed by an evaluation of the environmental effects of implementing these project revisions. This evaluation considers whether incorporating the Project Description revisions would alter the impact analysis or conclusions presented in the Draft EIR.

Deleted text is shown in ~~strike through~~, and new text is double underlined. These changes are organized numerically according to where they occur in the Project Description.

As discussed in Response PD-13, RTC p. 4-175, beginning with the first paragraph on Draft EIR p. 77, the text has been changed as follows:

While San Francisco is by and large a densely developed urban area, fragments of unique plant and animal habitats, known as Significant Natural Resource Areas (Natural Areas), have been preserved within the parks of San Francisco and Pacifica that are managed by the SFRPD. In the late 1990s, the SFRPD developed a Natural Areas Program to protect and manage these Natural Areas for the natural and human values they provide. The Natural Areas Program mission is to preserve, restore, and enhance the remnant Natural Areas and to promote environmental stewardship of these areas. On January 19, 1995, the San Francisco Recreation ~~and~~ Park Commission approved the first Significant Natural Resource Areas Management Plan.

Since 1995, the SFRPD has embarked on an almost 10-year process that involved SFRPD, meetings with over 3,000 members of the public, task forces, advisory groups, independent technical advisers, consultants, and decision-making bodies to study, consider, and ultimately propose the 2006 Significant Natural Resource Areas Management Plan.

In June 2005, when the Draft SNRAMP was released for public review, three well-attended public workshops were held throughout the city. Outreach included sending fliers to neighborhood groups and residents within 300 feet of all Natural Areas, the Mayor's Office of Neighborhood Groups, SFRPD's list of neighborhood groups, and other interested parties. Announcements were also posted at all Natural Area sites. An online survey was available for individuals and members

of the public that were unable to attend in person. Feedback was received from approximately 2,700 members of the public. Further, several task forces, committees, and working groups were convened as part of this process, including (1) the Natural Areas Program Citizen Advisory Committee, an ad hoc group that made recommendations on how to revise the plan, (2) a Science Round Table group that reviewed the Alternatives Report for Sharp Park, and (3) the Sharp Park Working Group. The Sharp Park Working Group, which was convened by SFRPD and facilitated by an independent party, consisted of land managers with an interest in the property, including San Mateo County, the City of Pacifica, the Golden Gate National Recreation Area, and the SFRPD. In addition, revisions to the Sharp Park Restoration Plan were also specifically made in response to input from scientists and regulatory agencies.

Three independent scientific reviews of the 2005 Draft SNRAMP were also conducted in August 2005. The goal of this independent review was to assess the scientific basis for the plan and evaluate the goals, issues, and recommendations. Additionally, the reviewers were asked to determine if the 2005 Draft SNRAMP was feasible to implement and if implementation of the proposed management activities would result in the desired outcome. The first review was conducted by Dr. Lynn Huntsinger and James W. Bartolome,² who provided a detailed report to the SFRPD (Huntsinger and Bartolome 2005). This review reached the following overall conclusions:

- The 2005 Draft SNRAMP was based on sound science and was a reasonable compromise between ideals, practicality, and competing uses.
- The management goals (conservation, restoration, education, stewardship, recreation, and monitoring) are consistently addressed throughout the Plan.
- The proposed actions and monitoring seemed generally feasible.

The review suggested revisions to the recommendations dealing with management of the urban forest understory, grasslands (see GR-3 in Section 5), and butterfly host plants (see GR-10). The general recommendations referenced by these comments have been revised and updated. The review also suggested minor changes to the Monitoring protocols (Section 7), which were implemented.

A second review was conducted by Roy A. Woodward, PhD. Dr. Woodward made comments on and suggested edits to the text, particularly as it related to the Monitoring Plan and Protocols. The 2005 Draft SNRAMP was revised per these edits as appropriate.³

A third review was conducted by Peggy Fiedler, PhD. Dr. Fiedler concluded that the 2005 Draft SNRAMP in general succeeded in its goals and “strikes a balance between natural resource protection and the needs of citizens in a highly urbanized, densely populated, highly ethnically diverse, overall well-educated area.”⁴

Over the course of several years, Ultimately, the SFRPD updated and expanded the level of detail in the 1995 plan, as well as incorporated the comments from the above scientific reviews on the

² Review: Significant Natural Resource Areas Management Plan, Lynn Huntsinger and James W. Bartolome, Submitted to the San Francisco Recreation and Parks Department, August 2005.

³ Hand edits to 2005 SNRAMP text from Dr. Roy A. Woodward, Ph.D., Senior Environmental Scientist, Natural Resources Division, State of California, Department of Parks and Recreation, no date.

⁴ Peer review of the Public Draft Significant Natural Resource Areas Management Plan, June 2005, Peggy L. Fiedler, Ph.D., Senior Scientist II/Associate, BBL Ecosystem Science and Restoration Services to Ms. Lisa Wayne, San Francisco Recreation and Parks, September 29, 2005.

2005 Draft SNRAMP, ultimately resulting in a new the 2006 Final Draft Significant Natural Resource Areas Management Plan (SNRAMP, SFRPD 2006), with a final draft plan. The San Francisco Recreation and Park Commission approved the final draft SNRAMP plan for CEQA evaluation in August 2006. In April 2009, the Board of Supervisors introduced legislation that required the SFRPD to develop and plan for restoring Sharp Park for the California red-legged frog and the San Francisco garter snake; in response to this, the SFRPD began to develop the Sharp Park Conceptual Restoration Alternative Report, which was completed in September 2009.

In December 2009, the Recreation & Park Commission agreed to proceed with the Laguna Salada Restoration while preserving the 18-hole golf course at Sharp Park. In August 2011, the SNRAMP Draft EIR was released for public comment and in September 2011, a Historic Preservation Commission Hearing was held (with split votes as to whether Sharp Park is a historic resource) and in October 2011, the Planning Commission Hearing on the Draft EIR was held.

This SNRAMP contains detailed information on the biology, geology, and trails within 32 Natural Areas, 31 in San Francisco and one (Sharp Park) in Pacifica. The SNRAMP is intended to guide natural resource protection, habitat restoration, trail and access improvements, other capital projects, and maintenance activities over the next 20 years. The proposed project is the SFRPD's implementation of the SNRAMP

As discussed in Response HZ-1, RTC p. 4-531, the text on Draft EIR pp. 90 and 91 have been revised as follows:

IPM is a multistep ecologically based approach that enables staff to make decisions about where, when, and how resources should be best allocated to control pests. Conventional pest control methods attempt to control the symptoms of a pest problem, but IPM is a proactive strategy that focuses on identifying and reducing, or eliminating, the root cause of a pest problem. IPM implements effective, long-term management solutions through the use of a broad range of expertise, a combination of treatment methods, and comprehensive monitoring and evaluation.

In accordance with Chapter 39 of the San Francisco ~~Administrative-Environment~~ Code, the Natural Areas Program employs IPM as its strategy for preventing new and managing existing pest infestations. Four general weed management strategies exist: prevention, containment, reduction, and eradication; each of these results in a different level of weed control and reflects available resources. The Natural Areas Program's policy is to use the least-toxic control methods whenever feasible and practical. In addition, to reduce the need for pesticides, manual pest control efforts are employed by a collaborative effort between SFRPD employees and volunteers. Apart from the 10 full-time staff that conduct management and maintenance actions within the Natural Areas, the Natural Areas Program also has a robust volunteer program, with individual groups that range in size from 10 to 50 people.

Factors that make manual and/or mechanical methods impractical include:

- Direct threats to human health and safety (e.g., steep, inaccessible, unstable slopes, significant poison oak infestations, etc.);
- Large infestations requiring ongoing repeated strenuous physical labor, such as picking and lifting, that may cause injury to staff, contract field crews, or volunteers; and
- Areas where access, human trampling, or soil disturbance may directly or indirectly damage native plant communities, affect wildlife, or cause soil erosion.

Management methods to be employed by the Natural Areas Program include:

- Physical control methods employed by Natural Areas Program staff and volunteers, which range from hand-pulling weeds to the use of hand and mechanical tools to uproot, girdle, or cut plants;
- ~~Biological~~ Pest control,⁵ which, in the case of the Natural Areas Program, involves revegetating cleared areas and introducing native plants in an area to encourage competition with weeds; and
- Chemical control, which involves the use of herbicides to suppress wildland weeds; ~~and, in~~ compliance with the San Francisco Pest Management Ordinance.
- ~~Public education and outreach.~~

Only aquatic-specific herbicides (those determined safe for aquatic life) would be applied to wetlands and to areas next to water bodies. The application of herbicides, including Garlon and Roundup, is not allowed within 15 feet of either side of established trails.

As discussed in Response GE-1, RTC p. 4-472, the text on Draft EIR p. 94 has been changed to add the following paragraph after the second bullet on the page:

Where alternative materials are available to achieve the intended erosion control objectives while also minimizing inadvertent impacts to wildlife and habitat, a preference would be given to the use of biodegradable, certified weed-free, and wheat-free erosion control materials. To help ensure that appropriate materials are used that are compatible with the materials and features present at the sites in which they are used, a qualified SFRPD biologist would be consulted during design of erosion control measures.

As discussed in Response PD-13, RTC p. 4-175, the beginning of the only full paragraph on Draft EIR p. 98 has been changed as follows:

The Sharp Park Restoration project is a voluntary and discretionary action by the City, a primary purpose of which is to provide higher quality habitat for the San Francisco garter snake, a State and Federally endangered species, as well as a species identified as fully protected under the State Fish and Game Code, and the California red-legged frog, a State threatened species; further, it is an action that is consistent with the species recovery objectives of both the federal Endangered Species Act and the California Endangered Species Act. The improvements to protect and enhance the California red-legged frog and San Francisco garter snake at Laguna Salada under measure SP-4a are focused on restoring the marsh complex and associated uplands. ...

As discussed in Response BI-7, RTC p. 4-365, after the first paragraph on Draft EIR p. 102, the following text is added.

To facilitate the proposed sediment and emergent vegetation removal and to reduce potential impacts to California red-legged frog, suction hydraulic equipment may be used in consultation with the USEWS and CDFW to minimize the disturbance of sediments in the water. While

⁵ Pest control generally involves the management of pests (insects, diseases, weeds) by manipulation of the environment or implementation of preventive practices including using plants that are resistant to pests, raising the mowing height of turf to shade out weeds, aerating turf to reduce compaction and plant stress, or dethatching to remove habitat, food sources and impediments to management.

generally resulting in a higher percentage of water in the excavated materials than a clamshell dredge, the use of suction hydraulic equipment generally results in less turbidity and overall disturbance at the point of use than a clamshell. In sensitive environments, the use of suction hydraulic equipment is often preferred, provided that the excavated materials and residual water are properly handled. If suction hydraulic equipment is to be used as part of this project, the slurry that is created by suction hydraulic equipment would go into a settling area until the sediments settle out and the decant water can be tested for its acidity. If the result of such testing indicates that the water is pH neutral, it would either be released into the Horse Stable Pond or pumped into the Pacific Ocean.⁶ No permit is required for discharges from the Laguna Salada Wetland Complex into the Pacific Ocean because both the Laguna Salada Wetland Complex and the Pacific Ocean are considered “waters of the United States” under the federal Clean Water Act. However, should any permit be required by SFBWQCB or any other resource agency for the proposed SNRAM project, SFRPD will seek such a permit and comply with any and all conditions that are attached to the permit,⁷ as already indicated by Table 3, Potentially Required Regulatory Approvals, p. 81.

As discussed in Response PD-13, RTC p. 4-175, the text on Draft EIR p. 103, lines 7 to 10, has been changed as follows:

Following completion of each season’s restoration activities (anticipated between May 1 and October 15), those staging and storage areas that are not permanently modified (or identified as staging or storage areas for the next season’s restoration activities) would be scarified, recontoured, and hydroseeded with native vegetation to approximate their pre-disturbance condition.

As discussed in Response BI-7, RTC p. 4-365, the text on Draft EIR p. 103, lines 22 to 26, has been changed as follows:

To protect the California red-legged frogs and San Francisco garter snakes during restoration work, the SFRPD anticipates conducting the restoration activities between May 1 and October 15 and would continue to coordinate the planning and undertaking of these activities with the USFWS and CDFG; this activity period avoids the breeding season for the California red-legged frog and the season when San Francisco garter snakes are inactive in their winter burrows. ...

As discussed in Response PD-12, RTC p. 4-168, the following paragraph has been added to Draft EIR p. 104 following Table 4, Laguna Salada Habitat Types within Restoration Footprint, to clarify the changes to the Sharp Park Natural Area boundary resulting from completion of the Sharp Park Restoration Project, as follows:

Following completion of the Laguna Salada Sharp Park Restoration Project, those areas that were previously designated as part of the golf course that have been restored to provide habitat for special-status species would become part of the Sharp Park Natural Area.

⁶ San Francisco Planning Department, *Sharp Park Safety, Infrastructure Improvement, and Habitat Enhancement Project Final Mitigated Negative Declaration*, January 17, 2014, p. 88.

⁷ San Francisco Planning Department, *Sharp Park Safety, Infrastructure Improvement, and Habitat Enhancement Project Final Mitigated Negative Declaration*, January 17, 2014, p. 103.

As initiated by staff, the text provided in the last bullet on Draft EIR p. 105 has been changed as follows:

- While General Recommendation GR-8b of the SNRAMP mentions consideration of new dog play areas (DPAs), no new DPAs are proposed as part of the project, ~~due to the current moratorium on new DPAs;~~⁸

As discussed in Response BI-32, RTC p. 4-441, the text on Draft EIR p. 109, fourth bullet, has been changed as follows:

GR-4c – If surveys indicate that parasitism by brown-headed cowbirds or predation by crows, European starlings, English house sparrows, or other bird species subsidized by human activities is a significant problem, consult with the CDFG and the USFWS to determine the proper protocols course of action, if any, to address population increases of these species and to minimize the ~~negative~~ effects of ~~this~~ these species on local breeding birds.

As discussed in Response AE-1, RTC p. 4-220, a footnote has been added to Table 5 on Draft EIR p. 114 to indicate that the replacement locations have not yet been determined. In addition, as initiated by Staff, Table 5 has also been revised to indicate the reduction in the size of the McLaren Park Natural Area. The SNRAMP and the Draft EIR identified the entire McLaren Park Natural Area as subject to the SNRMAP. Since publication of the SNRAMP, the SFRPD noted that the SNRAMP identified the McLaren Park Natural Area as entirely within SFRPD jurisdiction; however, a 12-acre portion of McLaren Park known as the Amazon Reservoir Tract is under the jurisdiction of the San Francisco Public Utilities Commission (SFPUC). The SFPUC recently indicated their desire to regain management of 6.32 acres of the Amazon Reservoir Tract and have requested that it is removed from the SNRAMP and SNRAMP Draft EIR. Consequently, as the SNRAMP would no longer apply to a portion of the Amazon Reservoir Tract, the Draft EIR has been revised to reflect removal of this area from the SNRAMP.

⁸ The Draft EIR conservatively characterized the ~~There is~~ direction from the Recreation & Park Commission ~~not to concerning establishment of establish~~ new DPAs ~~as until systemwide DPA planning is completed. For the purposes of this EIR, this is considered a moratorium for the purpose of analyzing cumulative impacts in the Natural Areas in that no new DPAs are reasonably foreseeable.~~ This direction was ~~announced~~ presented at the October 10, 2006, meeting of the San Francisco Dog Advisory Committee; addressed in a July 19, 2007, SFRPD memorandum on the Status of the Dog Advisory Committee Work Plan; and discussed during the August 16, 2007, meeting of the San Francisco Recreation & Park Commission. New or improved DPAs may be pursued in San Francisco by the SFRPD and/or through community-driven efforts; however, none are proposed or envisioned in the Natural Areas. For the purposes of this EIR, it is assumed that no new DPAs are reasonably foreseeable to provide a worst-case analysis.

**Table 5
Summary of Natural Areas Management Plan**

Natural Area Site	Park Acreage	Natural Area Acreage*	Management Area (acres)				Invasive Trees			Trails (feet)				Dog Play Areas (acres)			
			MA-1	MA-2	MA-3	Total MA ¹	Existing	To Remove	To Remain	Existing	To Close/Relocate	To Create	Resulting	Existing	To Remove	To Remain	Monitor**
Balboa	1.8	1.8	1.1	0.7	0	1.8	0	0	0	637	90	0	547				
Bayview Park	43.9	43.9	8.2	15.8	19.7	43.7	6,000	511	5,489	8,496	1,439	1,020	8,077				
Bernal Hill	24.3	24.3	7.6	5.8	10.7	24.1	100	0	100	12,239	4,544	464	8,159	21.0	6.0	15.0	No
Billy Goat Hill	3.5	3.5	0.6	1.1	1.6	3.3	20	0	20	2,600	745	0	1,855				
Brooks Park	3.5	2.0	0.8	0.9	0.3	2.0	20	3	17	1,340	456	0	884				
Buena Vista Park	36.1	6.1	0	6.1	0	6.1	140	10	130	3,741	0	0	3,741	1.0	0	1.0	Yes
Corona Heights	12.6	9.6	2.9	2.5	4.2	9.6	200	15	185	6,701	1,845	0	4,856	0.4	0	0.4	No
Dorothy Erskine Park	1.5	1.5	0.2	0.3	1.0	1.5	100	14	86	771	0	0	771				
Duncan-Castro	0.5	0.5	0.3	0.1	0.1	0.5	0	0	0	333	0	0	333				
Edgehill Mountain	2.3	2.3	0	0.9	1.4	2.3	300	0	300	747	0	438	1,185				
Everson/Digby	1.2	1.2	0.9	0.1	0.2	1.2	0	0	0	0	0	0	0				
Fairmount Park	0.7	0.7	0	0	0.7	0.7	100	0	100	187	0	0	187				
Glen Canyon Park and O'Shaughnessy Hollow***	72.6	63.8	8.1	33.0	22.4	63.5	6,000	120	5,880	23,242	3,653	0	19,589				
Golden Gate Heights	6.0	0.8	0.2	0.5	0.1	0.8	30	0	30	559	390	188	357				
Golden Gate Park Oak Woodlands	1,021.0	26.2	0.7	25.5	0	26.2	900	82	818	24,844	12,381	0	12,463	2.8	0	2.8	Yes
Grandview Park	4.0	4.0	0.9	2.4	0.7	4.0	25	5	20	1,722	409	0	1,313				
Hawk Hill	4.5	4.5	1.4	3.0	0	4.4	10	0	10	1,609	692	0	917				
India Basin Shoreline Park	11.8	6.2	3.2	2.8	0	6.0	0	0	0	1,885	0	0	1,885				
Interior Greenbelt	19.4	16.5	0	1.8	14.7	16.5	5,800	140	5,660	935	0	620	1,555				
Kite Hill	2.7	2.7	0.6	0.5	1.6	2.7	10	0	10	1,957	398	0	1,559				
Lake Merced	614.0	395.0	60.8	101.8	231.5	394.1	12,000	134	11,866	11,106	3,319	365	8,152	5.0	5.0	0	
Lakeview/Ashton Mini Park	0.5	0.5	0.1	0.2	0.2	0.5	0	0	0	651	0	0	651				
McLaren Park****	<u>306.3</u> 312.6	<u>159.0</u> 165.3	<u>31.7</u> 34.9	<u>66.0</u> 68.3	<u>60.6</u> 61.4	<u>158.3</u> 164.6	19,500	809	18,691	59,185	15,681	0	43,504	61.7	8.3	53.4	Yes
Mount Davidson	40.2	40.2	8.8	11.0	20.1	39.9	11,000	1,600	9,400	15,456	2,867	0	12,589				
Palou-Phelps	2.5	2.1	0.8	0.4	0.8	2.0	40	2	38	1,049	527	496	1,018				
Pine Lake	30.3	8.4	1.0	3.8	3.6	8.4	1,000	0	1,000	3,157	608	13	2,562	3.3	0	3.3	No
Rock Outcrop	1.6	1.6	0.8	0.7	0	1.5	0	0	0	0	0	0	0				
Tank Hill	2.9	2.9	1.5	0.6	0.7	2.8	50	0	50	2,672	1,411	0	1,261				
Twin Peaks	34.1	31.1	12.6	14.3	3.8	30.7	88	3	85	8,741	2,303	501	6,939				
15th Avenue Steps	0.3	0.3	0	0.2	0	0.2	0	0	0	0	0	0	0				
San Francisco Subtotal	2,312.9	869.5	159.0	305.1	401.5	865.6	63,433	3,448	59,985	196,562	53,758	4,105	146,909	95.2	19.3	75.9	
Sharp Park (Pacifica)	411.0	237.2	35.0	125.1	76.5	236.6	54,000	15,000	39,000	14,741	653	1,792	15,880				
Total	2,723.9	1,106.7	194.0	430.2	478.0	1,102.2	117,433	18,448	98,985	211,303	54,411	5,897	162,789	95.2	19.3	75.9	

*The total acreages for the management areas do not exactly match the Natural Areas acreages. The Natural Areas acreages are based on vegetation series within each Natural Area where the geographic information system data was precisely clipped to the Natural Area boundary. Management areas were created by mapping their boundaries in the field with a GPS unit. This data was then edited by Natural Areas Program staff to match Natural Areas boundaries. This process created minor errors when the management area appeared to line up with the Natural Area boundary but in fact was off by a small amount. The average error is about 0.1 acre and never more than 0.8 acre. As would be expected, the error is largest in the larger Natural Areas because they have relatively longer boundaries.

**The SFRPD would monitor dog use and impacts on oak woodlands at Buena Vista and Golden Gate Park Oak Woodlands and impacts on small wildflower meadows in McLaren Park.

***Glen Canyon Park and O'Shaughnessy Hollow are two different Natural Areas; they are grouped together in this table, as they are in the SNRAMP.

****The acreage of the management areas within McLaren Park have been revised to reflect the exclusion of a portion of the Amazon Reservoir Tract that is under the jurisdiction of the SFPUC. Information regarding the number of trees, trails, or DPAs within the SFPUC Amazon Reservoir Tract and SFRPD McLaren Park is not available.

Note: All trees removed would be replaced, although not necessarily with the same species or within the same Natural Area.

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As discussed in Response G-23, RTC p. 4-93, the text provided in the fifth bullet on Draft EIR p. 110 has been changed as follows:

- GR-8b—Match on-leash and off-leash dog use with the sensitivity of the habitat when considering new DPAs within or next to Natural Areas;

(Note: ~~An underlying assumption of this EIR is that there would be no new DPAs because there is~~ The Draft EIR conservatively characterized the direction from the Recreation & Park Commission concerning establishment of new DPAs as not to establish new DPAs until systemwide DPA planning is completed. For the purposes of this EIR, this is considered a moratorium for the purpose of analyzing cumulative impacts in the Natural Areas in that no new DPAs are reasonably foreseeable. This direction was ~~announced~~ presented at the October 10, 2006, meeting of the San Francisco Dog Advisory Committee; addressed in a July 19, 2007, SFRPD memorandum on the Status of the Dog Advisory Committee Work Plan; and discussed during the August 16, 2007, meeting of the San Francisco Recreation & Park Commission. New or improved DPAs may be pursued in San Francisco by the SFRPD and/or through community-driven efforts; however, none are proposed or envisioned in the Natural Areas. ~~Should new DPAs be proposed at some point, the appropriate level of CEQA analysis would be undertaken, and applicable permits and other regulatory agency approvals would be obtained.~~)

As discussed in Response G-19, RTC p. 4-88 the text provided in the ninth bullet on Draft EIR p. 136 has been changed as follows:

- LM-7a—Relocate the DPA to a different area to avoid disturbing breeding birds in the current location; (Note: The SFRPD determined following completion of the final draft SNRAMP that, due to ongoing disturbance of breeding birds, this DPA should be closed, rather than monitored. This DPA would be closed in accordance with the SFRPD Final Dog Policy (SFRPD 2002) and SFPUC's Lake Merced Watershed Report (SFPUC 2011). ~~Due to the San Francisco moratorium on new DPAs, the Lake Merced DPA couldn't be relocated to a new location, so it would only be removed.~~ Restoration of the site would continue, following removal of the DPA.)

As initiated by staff, a second paragraph has been added to Draft EIR p. 137 of Section III.I.19:

McLaren Park covers 312.6 acres near the southeast corner of San Francisco and is bisected by Mansell Street. Sunnydale and Visitation Avenues cross the southern half of the park, while John F. Shelley Drive crosses the northern half. Recreational facilities within the park include over 11 miles of trails, tennis courts, ball fields, a golf course, picnic areas, and an amphitheater. Three designated DPAs are within the park, two within and one next to the Natural Area. The Natural Area covers 165.3 acres and is made up of grassland, scrub, and tree-dominated vegetation series.

Since publication of the SNRAMP, the SFRPD noted that the SNRAMP identified the McLaren Park Natural Area as entirely within SFRPD jurisdiction; however, a 12-acre portion of McLaren Park known as the Amazon Reservoir Tract is under the jurisdiction of the SFPUC. The SFPUC has recently indicated their desire to regain management of 6.32 acres of the Amazon Reservoir Tract and have requested that it is removed from the SNRAMP and SNRAMP Draft EIR. Consequently, as the SNRAMP would no longer apply to a portion of the Amazon Reservoir Tract, the Draft EIR has been revised to reflect removal of this area from the SNRAMP. Table 5 of this EIR reflects this change, further describing which management areas would be reduced in size.

A graphical representation of the 6.32-acre portion of the Amazon Reservoir Tract relative to the rest of McLaren Park is provided as Figure RTC-1, p. 2-11.

As discussed in Response PD-35, RTC p. 4-211, the text on Draft EIR p. 143, line 14, has been changed as follows:

Mori Point, ~~recently~~ acquired by the GGNRA in 2004, borders the southwestern edge, and the Sweeny Ridge GGNRA borders the park on the southwestern and eastern edges.

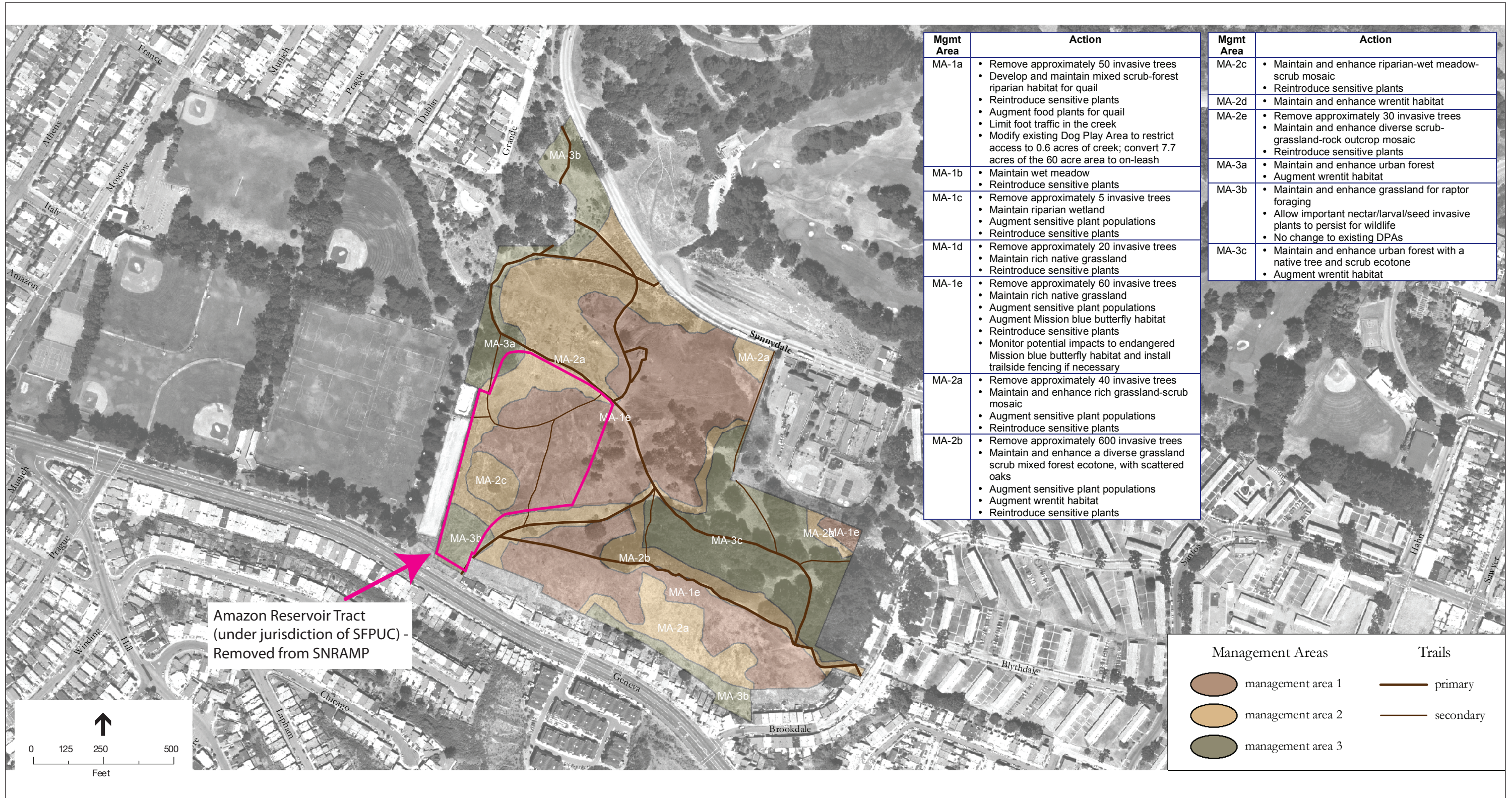
As discussed in Response PD-29, RTC p. 4-204, the text on Draft EIR p. 144, seventh bullet, has been changed as follows:

- SP-3a – Preserve natural or biodegradable elements (branches, trees, and logs) during vegetation management and remove other materials. Elements that are contaminated with invasive species (such as invaded with ripe seeds, cape ivy, untreated [chemically] eucalyptus trees, etc.) would not be retained;

2.B ENVIRONMENTAL EFFECTS OF THE PROJECT DESCRIPTION REVISIONS

The Project Description changes, as outlined above, include the following minor changes or clarifications: (1) clarification of existing text or data; (2) refinement of a project objective or SNRAMP Recommendation; (3) clarification of construction methods at Sharp Park; (4) clarification that the restored areas at Laguna Salada would become part of the Sharp Park Natural Area following restoration activities; (5) expanding the list of potential predators on native, local breeding birds; (6) removing a 6.32 acre portion of the Amazon Reservoir Tract that is under SFPUC jurisdiction from the McLaren Park Natural Area; and (7) editorial changes.

In summary, the modifications to the Project Description would not result in new significant environmental impacts or substantially increase the severity of a significant impact identified in the Draft EIR, and no new mitigation measures would be necessary. Therefore, no further analysis of the above Project Description modifications is necessary. Further, these revisions do not change any of the conclusions in the Draft EIR and do not constitute significant new information that requires recirculation of the Draft EIR under CEQA (California PRC Section 21092.1) and the CEQA Guidelines (14 CCR Section 15088.5).



SOURCE: San Francisco State University, Institute for Geographic Information Science; revised August 23, 2005.

Significant Natural Resources Area Management Plan Responses to Comments . 140440

Figure RTC-1
Location of Amazon Reservoir Tract Relative to McLaren Park

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2.C CUMULATIVE IMPACT ANALYSIS CHANGES

The analysis of the potential for the project's incremental effects to be cumulatively considerable is based on a list of related projects identified by San Francisco and neighboring jurisdictions, as provided in Appendix G of the Draft EIR. This list includes those San Francisco Planning Department projects within a quarter mile of a Natural Area that are active or that were closed on or after January 1, 2009. The list also includes General Plan area plans within a quarter mile of each Natural Area. The analysis is also based on reasonably anticipated buildout of the San Francisco General Plan or other planning documents, depending on the specific impact being analyzed. The list of cumulative projects provided in Appendix G was updated in the summer of 2016 to include those past, present, or reasonably foreseeable projects identified since 2009. The updated list is provided in Section 0, RTC p. 61, which will augment Appendix G of the Draft EIR.

The cumulative analysis for recreation, hazards and hazardous materials, cultural resources, biological resources, and hydrology and water quality has been updated (as text changes to the Draft EIR) to reflect the new cumulative projects identified since 2009. The updated analysis is presented in the text changes provided in Chapter 5, RTC p. 5-1. In addition, key responses that also address cumulative impacts are provided in Response G-13, RTC p. 4-62; Response G-15, RTC p. 4-65; Response G-23, RTC p. 4-93; Response PD-9, RTC p. 4-151; Response PD-13, RTC p. 4-175; Response LU-4, RTC p. 4-216; Response CP-4, RTC p. 4-255; Response GG-1, RTC p. 4-297; Response RE-3, RTC p. 4-319; Response RE-4, RTC p. 4-320; Response RE-12, RTC p. 4-341; Response RE-13, RTC p. 4-347; Response BI-12, RTC p. 4-391; Response BI-34, RTC p.4-467; Response HY-2, RTC p. 4-493; and Response HY-5, RTC p. 4-501.

None of the projects identified since 2009 result in a change in the analysis or conclusions of the cumulative impact analysis provided in the Draft EIR.

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RTC CHAPTER 3 List of Persons Commenting

3.A WRITTEN COMMENTS

Public agencies, organizations, and individuals submitted written comments (letters, emails, and facsimiles) on the Draft EIR, which the City received during the public comment period from August 31, 2011, to October 31, 2011, and from April 27, 2012, to June 11, 2012. In addition, the Planning Commission held a public hearing on the Draft EIR on October 6, 2011, and Commissioners, organizations, and individuals made oral comments at that hearing. A complete list of commenters, with the corresponding written communication and/or transcript designation for each, is provided below in Table 3-1, List of Written Comment Letters Received on the Draft EIR, and Table 3-2, Oral Comments Received on the Draft EIR, RTC p. 3-13. In Table 3-1, the names of persons who submitted written comments are presented first, organized into three groups: A, comments from agencies (i.e., federal, state, and local); B, comments from organizations; and C, comments from individuals. Within each group, written comments are organized alphabetically. In Table 3-2, commenters are presented in the order in which they spoke.

Attachment A, Comment Matrix by Commenter, contains a matrix identifying each commenter, the commenter’s affiliation (if any), the comment letter number, a designation for individual comments contained within each comment letter, and the response number to which each individual comment is assigned within this RTC document.

Table 3-1 List of Written Comment Letters Received on the Draft EIR		
<i>Designation</i>	<i>Commenter</i>	<i>Date of Written Comments</i>
WRITTEN COMMENTS RECEIVED DURING THE PUBLIC COMMENT PERIOD OF AUGUST 31, 2011, TO OCTOBER 31, 2011		
A. Agencies		
<i>Federal Agencies</i>		
NPS-1	National Park Service, Golden Gate National Recreation Area Frank Dean, General Superintendent	October 31, 2011
<i>State Agencies</i>		
CCC-1	California Coastal Commission Renee Ananda, Coastal Program Analyst	November 16, 2011
NAHC-1	Native American Heritage Commission Katy Sanchez, Program Analyst	September 7, 2011
OPR-1	Office of Planning and Research Scott Morgan, Director, State Clearinghouse	October 18, 2011
<i>Local Agencies</i>		
BAAQMD-1	Bay Area Air Quality Management District Christine Holmes, Human Resources Analyst	October 17, 2011

Table 3-1 List of Written Comment Letters Received on the Draft EIR		
<i>Designation</i>	<i>Commenter</i>	<i>Date of Written Comments</i>
City of Pacifica-1	City of Pacifica Mary Ann Nihart, Mayor	October 26, 2011
HPC-1	San Francisco Historic Preservation Commission Charles Chase, President	September 26, 2011
B. Organizations		
BAGCNC-1	Bay Area Golf Club of Northern California Nathaniel Jackson, President	October 5, 2011
BDunes-1	Bandon Dunes Michael L. Keiser	September 22, 2011
CAAONC-1	Council of Armenian American Organizations of Northern California Charles Paskerian, Chairman	October 5, 2011
CBD-1	Center for Biological Diversity Jeff Miller, Conservation Advocate	October 31, 2011
CFDG-1	Crissy Field Dog Group Martha Walters, Chair	October 31, 2011
CNPS-1	California Native Plant Society, Yerba Buena Chapter Jake Sigg, Chair, Conservation Committee	October 31, 2011
DB-1	Doggie Business Janet Slissman	October 30, 2011
DogPACSF-1	DogPAC SF Bruce Wolfe	October 31, 2011
FOW-GGP-1	Friends of Oak Woodlands – Golden Gate Park Robert Bakewell, Co-founder	October 31, 2011
GCSAA-1	Golf Course Superintendents Association of America J. Rhett Evan, Chief Executive Officer	October 6, 2011
GGAS-1	Golden Gate Audubon Society Michael Lynes, Conservation Director	October 31, 2011
GGHNA-1	Golden Gate Heights Neighborhood Association Sally Stephens, President	October 31, 2011
GLS-1	Gay and Lesbian Sierrans of the San Francisco Bay Chapter of the Sierra Club [Illegible Signatures]	November 1, 2011
MGSG-1	Mission Greenbelt Sidewalk Gardens Amber Hasselbring	October 5, 2011
MPIC-1	Miraloma Park Improvement Club Dan Liberthson, Corresponding Secretary	October 6, 2011
NGCOA-1	National Golf Course Owners Association Michael K. Hughes, CEO	December 1, 2011

Table 3-1 List of Written Comment Letters Received on the Draft EIR		
<i>Designation</i>	<i>Commenter</i>	<i>Date of Written Comments</i>
NTC-1	Nature in the City Peter Brastow, Founding Director	November 1, 2011
NTC-2	Nature in the City Peter Brastow, Founding Director	September 30, 2011
PGA-1	The Professional Golfers' Association of America Allen Wronowski, PGA, President, and Joseph P. Steranka, Chief Executive Officer	September 27, 2011
SCBC-1	Sierra Club Bay Chapter Arthur Feinstein California Native Plant Society, Yerba Buena Chapter Casey Allen, President Golden Gate Audubon Society Noreen Weeden, Volunteer Coordinator San Francisco Tomorrow Jennifer Clary, President Wild Equity Institute Brent Plater Executive Director Nature in the City Peter Brastow, Executive Director San Francisco League of Conservation Voters Steven Krefting	September 26, 2011
SFDOG-1	San Francisco Dog Owners Group Sally Stephens, Chair	October 6, 2011
SFDOG-2	San Francisco Dog Owners Group Sally Stephens, Chair	October 30, 2011
SFPGA-1	San Francisco Public Golf Alliance Richard Harris	September 20, 2011
SFPGA-2	San Francisco Public Golf Alliance Richard Harris	October 25, 2011
SFPGA-3	San Francisco Public Golf Alliance Richard Harris	October 31, 2011
SFSPCA-1	San Francisco Society for the Prevention of Cruelty to Animals Jennifer Scarlett, Co-President	October 24, 2011
SFT-1	San Francisco Tomorrow Jennifer Clary, President	October 31, 2011
SF Tree-1	San Francisco Tree Council Carolyn Blair, Past Founder, San Francisco Tree Council, Founding Member, SF Urban Forest Council	October 3, 2011
Sierra Club-1	Sierra Club, San Francisco Bay Chapter Arthur Feinstein, Conservation Chair, San Francisco Group	October 31, 2011

Table 3-1 List of Written Comment Letters Received on the Draft EIR		
<i>Designation</i>	<i>Commenter</i>	<i>Date of Written Comments</i>
Tank Hill Neighbors-1	Paul R. Potter Elizabeth W. Potter Alicia Snow Donna Goodman Terry Craig Lucy Horner Lisa Gautier Patrice Gautier Betty Singer Paul Conttorma [4 Illegible Signatures]	October 18, 2011
WEI-1	Wild Equity Institute Brent Plater	October 31, 2011
WGF-1	World Golf Foundation Stephen F. Mona, Chief Executive Officer	September 29, 2011

C. Individuals

Adam-1	Adam	October 4, 2011
Adams-L-1	Lile Adams	October 4, 2011
Adams-S-1	Susan Adams	October 4, 2011
Ahlberg-1	Todd Ahlberg	October 5, 2011
Anonymous-1	Anonymous	September 21, 2011
Anonymous-2	Anonymous	September 21, 2011
Anonymous-3	Anonymous	Undated
Archer-1	Donna Archer	October 5, 2011
Armanini-1	Mark Armanini	October 28, 2011
Art-1	Catherine Art	November 4, 2011
Asher-1	Poe Asher	October 30, 2011
Barnsdale-1	Mary Barnsdale	October 29, 2011
Bartley-1	Eddie Bartley	October 31, 2011
Bartolotta-1	Victor Bartolotta	October 31, 2011
Baye-1	Peter R. Baye	October 31, 2011
Beberman-1	Gary Beberman	October 4, 2011
Beemsterboer-1	Joni Beemsterboer	October 29, 2011
Betcher-1	Peter Betcher	October 31, 2011
Blum-1	Jan Blum	October 12, 2011
Borden-1	Tom Borden	November 2, 2011
Bors-1	Margo Bors	September 26, 2011

Table 3-1 List of Written Comment Letters Received on the Draft EIR		
<i>Designation</i>	<i>Commenter</i>	<i>Date of Written Comments</i>
Bose-1	Rupa Bose	October 24, 2011
Bowling-1	Alane Bowling	October 31, 2011
Bowman-1	Arnita Bowman	October 31, 2011
Brown-1	Judith Brown	October 28, 2011
Browne-1	Luke Browne	October 31, 2011
Browning-1	Nadine Browning	October 31, 2011
Browning-2	Nadine Browning	October 31, 2011
Browning-3	Nadine Browning	October 31, 2011
Buckley-1	Kathy Buckley	October 31, 2011
Buffa-1	Andrea Buffa	October 29, 2011
Butler-1	Barbara Butler and Jeffrey Beal	October 30, 2011
Cabada-1	Ingrid Cabada	October 29, 2011
Campbell-C-1	Christopher Campbell	October 31, 2011
Campbell-N-1	Norma Campbell	October 31, 2011
Carrington-1	Rick Carrington	October 4, 2011
Caskey-1	Julie Caskey	October 5, 2011
Cech-1	Nancy Cech	October 4, 2011
Cerf-1	Diane Cerf	October 31, 2011
Chambers-1	Thompson Chambers	October 31, 2011
Chase-1	Greg Chase and Eva and Oban	October 28, 2011
Chasnoff-1	Debra Chasnoff	October 31, 2011
Child-1	Katrina Child	October 31, 2011
Chirico-1	John Chirico	October 30, 2011
Cook-1	Elizabeth Cook	October 31, 2011
Corvan-1	Marianna Corvan	October 3, 2011
Coxon-1	Michele Coxon	October 31, 2011
Creely-1	Elizabeth Creely	October 31, 2011
Crouch-1	Dyer Crouch	October 24, 2011
D'Antonio-1	Georgia D'Antonio and Corinne Barreca	October 12, 2011
Delacroix-1	Pierre Delacroix	October 31, 2011
Demetrious-1	Amad Demetrious	October 31, 2011
Devine-1	Deirdre Carlin Devine	October 30, 2011
DeWitt-1	Natalie DeWitt	October 30, 2011
Donovan-1	Catherine Donovan	October 24, 2011

Table 3-1 List of Written Comment Letters Received on the Draft EIR		
<i>Designation</i>	<i>Commenter</i>	<i>Date of Written Comments</i>
Dotz-1	Lawrence Dotz	October 31, 2011
Dougherty-1	Mary Dougherty	October 31, 2011
Drechsler-1	Richard Drechsler	October 31, 2011
Elkins-1	Tod Elkins	October 10, 2011
Elliott-1	Lisa Ruth Elliott	October 31, 2011
Emanuel-1	David Emanuel	October 24, 2011
Emanuel-2	David Emanuel	October 25, 2011
Enzi-1	Christopher Enzi	October 29, 2011
Fasman-1	Michael Fasman	October 29, 2011
Fitzer-1	Susan, Gene, and Wanda Fitzer	October 31, 2011
Flasher-1	Bob Flasher	October 31, 2011
Fong-1	Edward Fong	October 17, 2011
Form Letter-1	Various commenters (refer to Attachment B, Draft EIR Comment Letters, pp. B-645 to B-843)	October 30, 2011
Fox-1	Camilla Fox	October 31, 2011
Furney-1	Gary Furney	November 4, 2011
Gaar-1	Greg Gaar	October 12, 2011
Gachowski-1	Michele Gachowski	October 30, 2011
Garber-1	Ted Garber	October 31, 2011
Garbutt-1	Gerard Garbutt	October 4, 2011
Garnett-1	Elizabeth Garnett	October 7, 2011
Gavin-1	Gregory Gavin	October 25, 2011
Gerrie-1	Philip Gerrie	October 31, 2011
Ghosh-1	Samir Ghosh	October 31, 2011
Gleichenhaus-1	D. Peter Gleichenhaus	October 24, 2011
Gordon-1	Kelly Gordon	October 30, 2011
Gottesman-1	Judith Gottesman	October 31, 2011
Gravanis-1	Ruth Gravanis	October 31, 2011
Greenberg-1	Sharon Greenberg	October 31, 2011
Griggs-1	Michael Griggs	October 5, 2011
Grim-1	Dema Grim	October 31, 2011
Haire-1	Janet Haire	November 17, 2011
Hammer-1	Milo Hammer	October 31, 2011
Hartnett-1	William E. Harnett	October 26, 2011
Hasbrouck-1	Edward Hasbrouck	October 4, 2011

Table 3-1 List of Written Comment Letters Received on the Draft EIR		
<i>Designation</i>	<i>Commenter</i>	<i>Date of Written Comments</i>
Hatch-1	Carolyn Hatch	October 31, 2011
Hayes-1	Dylan, Veronica and Isa Hayes	November 1, 2011
Hecht-1	Alma Hecht	October 28, 2011
Hershkowitz-1	Daniel Hershkowitz	October 4, 2011
Hochschild-1	Frances Hochschild, Christie Hochschild, and Isabella Hochschild	October 26, 2011
Holzman-1	Barbara Holzman	October 25, 2011
Hooker-1	Steve Hooker	October 29, 2011
Horn-1	Margaret A. Horn	October 26, 2011
Hovland-1	Madeline Hovland	October 27, 2011
Huebsch-1	Nina Huebsch	October 13, 2011
Hull-1	Prudence Hull	October 30, 2011
Illig-1	Jim Illig	October 31, 2011
Ingle-1	Kay Ingle	October 31, 2011
Jake-1	Krist Jake	October 31, 2011
Johnson-1	Amanda Johnson	October 31, 2011
Joyce-1	Ann Joyce	October 4, 2011
Jungreis-1	Jason Jungreis	October 31, 2011
Karpa-1	Mike Karpa	October 30, 2011
Kathie-1	Kathie	October 4, 2011
Keating-1	John B. Keating	October 31, 2011
Keats-1	Carma Keats	October 31, 2011
Keitelman-1	Mary Keitelman	September 21, 2011
Kelly-1	Kimberly Kelly	October 31, 2011
Kenealy-1	Patrick Kenealy	October 31, 2011
Kesel-1	Rachel Kesel	October 21, 2011
Kessler-1	Janet Kessler	October 24, 2011
Kessler-2	Janet Kessler	October 25, 2011
Kind-1	Jean Kind	October 31, 2011
King-1	Julie King	October 31, 2011
Koster-1	Carolyn Koster	October 13, 2011
Koury-1	Richard Koury	October 31, 2011
Kovinsky-1	Matthew Kovinsky	October 27, 2011
Kushner-1	Pinky Kushner	October 31, 2011
Langille-1	Celeste Langille	October 31, 2011

Table 3-1 List of Written Comment Letters Received on the Draft EIR		
<i>Designation</i>	<i>Commenter</i>	<i>Date of Written Comments</i>
Lansdown-1	Victoria Lansdown	October 17, 2011
Lapins-1	Denise Lapins	October 30, 2011
Lee-P-1	Pam Lee	October 10, 2011
Lee-Y-1	Yen L. Lee	November 14, 2011
Lendaro-1	Melody Lendaro	November 1, 2011
Levins-1	Alan S. Levins	October 18, 2011
Links-1	Bo Links	September 29, 2011
Litehiser-1	Linda Stark Litehiser	October 30, 2011
Lock-1	Ken Lock	October 5, 2011
Loeffler-1	Joan Loeffler	October 12, 2011
Lorenz-1	Henry Lorenz	October 31, 2011
Louie-1	Denise Louie	October 31, 2011
Lu-1	Kathy Lu	October 31, 2011
Lundeen-1	Eddie Lundeen	October 6, 2011
Lynch-1	Paul Lynch	October 3, 2011
Mace-1	Shannon Mace	October 29, 2011
Madar-1	Jennifer Madar	October 29, 2011
Mansbach-1	Larry Mansbach	October 28, 2011
Mar-1	Glenn Mar	October 13, 2011
Masud-1	Chuck Masud	October 4, 2011
Mattingly-1	Judith Mattingly	October 29, 2011
McAllister-1	Mary McAllister	September 22, 2011
McAllister-2	Mary McAllister	October 26, 2011
McAllister-3	Mary McAllister	October 24, 2011
McCalla-1	Kim McCalla	October 31, 2011
McGinnis-1	Paula McGinnis	October 28, 2011
Miller-E-1	Eric Miller	October 25, 2011
Miller-J-1	Jennifer Miller	October 4, 2011
Miller-N-1	Norma Miller	October 12, 2011
Mills-1	Claire Mills	October 31, 2011
Miner-1	Laura Brunow Miner	October 29, 2011
Minsuk-1	Sue Minsuk	October 30, 2011
Monagle-1	Patricia Monagle	October 30, 2011
Moseley-1	Beth Moseley	October 10, 2011

Table 3-1 List of Written Comment Letters Received on the Draft EIR		
<i>Designation</i>	<i>Commenter</i>	<i>Date of Written Comments</i>
Moyer-1	Leigh Moyer	October 31, 2011
Mundy-1	Al Mundy	October 4, 2011
Muniz-1	Laurel Muniz	October 5, 2011
Murphy-B-1	Bob Murphy	October 13, 2011
Murphy-D-1	Dan and Joan Murphy	October 31, 2011
Nagle-1	Taylor Nagle	October 31, 2011
Naima-1	Reza Naima	October 31, 2011
Nelson-1	Tiffany Nelson	October 31, 2011
Norton-1	Donald Norton and Nancy Sack	October 27, 2011
Oliva-1	Veronica Oliva	October 31, 2011
Olliphant-1	Hugh Olliphant	October 5, 2011
O'Neill-1	Elizabeth O'Neill	October 21, 2011
Otto-1	Nancy Otto	October 17, 2011
Pattillo-1	Chris Pattillo	October 27, 2011
Perrins-1	Georgina Perrins	October 30, 2011
Perry-J-1	John Perry	October 9, 2011
Pfister-1	Charles Pfister	October 31, 2011
Pittin-1	Renee Pittin	October 31, 2011
Popoff-1	Michael Popoff, Georgette Petropoulos	October 31, 2011
Pruitt-1	Beth Pruitt	October 31, 2011
Quinn-1	Chris Quinn	October 24, 2011
Radetsky-1	Ruth Radetsky	October 3, 2011
Raffaelli-1	Paulo Raffaelli	October 29, 2011
Rafferty-1	Patrick Rafferty	October 23, 2011
Randt-1	Bill Randt	October 4, 2011
Ray-1	Jamie Ray	October 31, 2011
Reichardt-1	Kathy Reichardt	October 9, 2011
Reque-1	Peter Reque	October 3, 2011
RileyHoppes-1	Donna Riley Hoppes	October 31, 2011
Rodriguez-1	Marilyn I. Rodriguez	October 27, 2011
Rogers-1	Glenn Rogers	October 31, 2011
Roman-1	Jonathan Roman	October 27, 2011
Rosentahl-1	Nancy Rosenthal	October 7, 2011
Rotter-E-1	Elizabeth W. Rotter	October 30, 2011

Table 3-1 List of Written Comment Letters Received on the Draft EIR		
<i>Designation</i>	<i>Commenter</i>	<i>Date of Written Comments</i>
Rotter-P-1	Paul Rotter	October 19, 2011
Saino-1	Celia Saino	October 30, 2011
Salamone-1	Lisa Salamone	October 29, 2011
Saltzer-Lamb-1	Vicki Saltzer-Lamb	October 31, 2011
Schlund-1	Claus Schlund	October 31, 2011
Schmoll-1	Gisela Schmoll	October 31, 2011
Scott-1	Jan Scott	October 31, 2011
Sebastian-1	Sandi Sebastian	November 4, 2011
Shapiro-1	Arthur M. Shapiro	October 6, 2011
Sharp-1	Alisa Sharp	October 3, 2011
Shepard-J-1	Jane Shepard	October 31, 2011
Simons-1	Kevin Simons	October 4, 2011
Skippy-1	Skippy	October 3, 2011
Smith-1	Megan Smith	October 31, 2011
Stafford-1	Nancy Stafford	October 31, 2011
Stevenson-1	Jan Stevenson	Undated
Stewart-M-1	Matt Stewart	October 5, 2011
Strasbaugh-1	Louise Strasbaugh	October 3, 2011
Stringer-1	Lew Stringer	October 31, 2011
Summer-1	William Summer	October 31, 2011
Sutch-1	Jeff Sutch	October 31, 2011
Swenerton-1	Kirra Swenerton	October 28, 2011
Thompson-C-1	Clare M. Thompson	October 31, 2011
Thompson-D-1	Doug Thompson	October 5, 2011
Tondelli-1	Natalie Tondelli	October 31, 2011
Tully-1	Sean Tully	October 1, 2011
Valente-1	Suzanne M. Valente and Stephen R. Golub	Undated
Vittori-1	Lisa Vittori	October 31, 2011
Vitulano-1	Karen Vitulano	October 31, 2011
Von Erb-1	Jon Von Erb	October 27, 2011
Wade-1	Isabel Wade	October 31, 2011
Walker-1	Josh Walker	October 11, 2011
Weed-1	Thomas Weed	October 31, 2011
Werger-1	Alison Werger	November 1, 2011

<i>Designation</i>	<i>Commenter</i>	<i>Date of Written Comments</i>
Wilford-1	Linda Wilford	October 31, 2011
Wilson-1	Bill Wilson	October 31, 2011
Winqvist-1	Kelly Winqvist	October 31, 2011
Woo-1	Ginny Woo	October 29, 2011
Yip-1	TY Yip	October 31, 2011
Zendarski-1	Art Zendarski	October 31, 2011

WRITTEN COMMENTS RECEIVED DURING THE PUBLIC COMMENT PERIOD OF APRIL 27, 2012, TO JUNE 11, 2012

A. Agencies

None.

B. Organizations

GHCC-1	Green Hills Country Club Paul Grech and Joseph Michelucci	May 19, 2012
MPIC-2	Miraloma Park Improvement Club Dan Liberthson, Corresponding Secretary	June 7, 2012
SFFA-1	San Francisco Forest Alliance Eric Miller, President	May 14, 2012
SFFA-2	San Francisco Forest Alliance Eric Miller, President	May 18, 2012
SFFA-3	San Francisco Forest Alliance Eric Miller, President	June 8, 2012
WEI-2	Wild Equity Institute Brent Plater	July 23, 2012
WTPCC-1	West of Twin Peaks Central Council Matt Chamberlain, President	June 4, 2012

C. Individuals

Bachmanov-1	Eugene Bachmanov	June 7, 2012
Besser-1	Ken Besser	May 15, 2012
Bley-1	Andrew Bley	June 11, 2012
Bose-2	Rupa Bose	June 11, 2012
Bowman-2	Arnita Bowman	June 11, 2012
Burgard-1	Joe Burgard and Suzanne Kirrane	June 10, 2012
Caughman-1	Erin Caughman	June 10, 2012
Freedman-1	Aubrey Freedman	June 10, 2012
Glikshtern-1	Anastasia Glikshtern	May 26, 2012
Gomez-1	Oswald L. Gomez and Carol L. Borden-Gomez	June 9, 2012
Heldman-1	Mary Heldman	June 5, 2012

Table 3-1 List of Written Comment Letters Received on the Draft EIR		
<i>Designation</i>	<i>Commenter</i>	<i>Date of Written Comments</i>
Hess-1	Claire Hess, David Hess, David Young, Helen Zisser, and David Zisser	May 27, 2012
Hu-1	Karin Hu	June 11, 2012
Ingram-1	Terry Ingram	May 16, 2012
Johns-1	Belinda Johns	May 16, 2012
Johnston-1	Carolyn Johnston	June 7, 2012
Kalafati-1	Anton Kalafati	June 19, 2012
Kass-1	Sidney Kass	June 2, 2012
Klebaner-1	Susanna Klebaner	June 5, 2012
Links-2	Robert D. "Bo" Links	June 11, 2012
Miller-E-2	Eric Miller	May 23, 2012
Miller-N-2	Norma Miller	June 2, 2012
Milstein-1	Prabha Milstein	May 16, 2012
Perry-A-1	Andrea and Arie Perry	May 31, 2012
Potts-1	Jason Potts	May 16, 2012
Rehling-1	Lu Rehling	May 15, 2012
Risk-1	Jane and Jerry Risk	May 19, 2012
Shepard-A-1	Avrum Shepard	June 10, 2012
Stewart-E-1	Ethan Stewart	June 1, 2012
Thayer-1	Nick Thayer	June 8, 2012
Thomas-1	Barbara Thomas	June 11, 2012
Zeiger-1	Felicia Zeiger	June 11, 2012

3.B PUBLIC HEARING COMMENTS

The names of persons who spoke at the October 6, 2011, public hearing follow, in the order of the speakers (refer to Attachment C, Draft EIR Hearing Transcript, for a copy of the hearing transcript).

Table 3-2 Oral Comments Received on the Draft EIR	
<i>Designation</i>	<i>Commenter</i>
PH-Stephens	Sally Stephens, Chair, San Francisco Dog Owner's Group
PH-Links	Bo Links
PH-Pittin	Renee Pittin
PH-Shaffer	Linda Shaffer, Vice-President, local chapter, California Native Plant Society
PH-Sherap	Tenzin Sherap
PH-Mozingo	George Mozingo
PH-Skain	Pat Skain
PH-Bryant	Clarence Bryant
PH-Rotter-P	Paul Rotter
PH-Rotter-N	Neff Rotter
PH-Bowman	Armita Bowman
PH-Gaar	Greg Gaar
PH-Brastow	Peter Brastow, Director, Nature in the City
PH-Keating	John Keating
PH-Harris	Richard Harris, Founder, Public Golf Alliance
PH-Noetzel	Steven Noetzel
PH-Emanuel	David Emanuel
PH-Solomon	Mark Solomon
PH-Antonini	Commissioner Michael Antonini, San Francisco Planning Commission

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RTC CHAPTER 4 **Comments and Responses**

The order of the comments and responses is shown below, with the subject area prefix indicated in square brackets:

Within each of these sections (or subject areas), such as General [G] or Biological Resources [BI], individual comments that are similar are further grouped together using a descriptive subheading and numbered sequentially. For example, General Comments [G] are listed as [G-1], [G-2], [G-3] and so on, with each responding to a similar set of comments (e.g., G-7, Prohibition on the Use of Artificial Turf; G-10, Public Outreach and Draft EIR Public Review Process; or G-17, Impacts on People within the Natural Areas). The response to the group of comments contained in Comment G-1 is termed Response G-1; similarly, the response to the group of comments contained in Comment PD-11 is termed Response PD-11.

The convention for assigning individual comment codes is as follows: Name of Agency/Organization/Individual-Letter Number-Comment Number. For instance, the first individual comment in Comment/Response G-6 is WTPCC-1-10, indicating that it is the first letter from the West of Twin Peaks Central Council (WTPCC), and it is the 10th comment in that letter. Using another example, Bowman-2-17 is the second letter from Arnita Bowman, and it is the 17th comment in that letter. Written comments were received as either letters or e-mails.

There are two primary tools to help the reader navigate the document, one allowing the reader to easily identify comments and responses by subject area and subheading, and the second allowing the reader to locate comments and responses by individual commenter. Each method is further described below.

Table 4-1, RTC p. 4-3, is organized by section of the Draft EIR and includes the detailed comment/response title and page number where both the comment and response is provided.

Because this RTC document groups similar comments together, as required by the City's Environmental Guidelines, an individual comment letter, and all of the responses to it, may be located in different parts of this document. Attachment A, Comment Matrix by Commenter, allows the reader to determine where responses to each of the comments are provided. Attachment A contains a matrix identifying each commenter (e.g., Arnita Bowman), the commenter's affiliation (if any), the comment letter number (e.g., Bowman-1 or Bowman-2), a designation of individual comments contained within each comment letter (e.g., Bowman-1-1, Bowman-2-1), and the response number that addresses each individual comment (e.g., G-6, PD-11, BI-16). For example, Attachment A shows that the response to Comment NPS-1-01 is addressed in Response PD-26. If a commenter wishes to cross-reference Table 4-1 and Attachment A, there is a common column – RTC Comment/Response No. – that allows easy correlation between the two tables.

Where revisions or clarifications to the text of the Draft EIR are made in response to public comments received on the Draft EIR or as initiated by City staff, deleted text is shown in ~~striketrough~~, and new text is double underlined. These changes are organized in the order of the Draft EIR table of contents, which is consistent with the list provided at the beginning of this Chapter. If text changes are not identified in response to a comment, it is assumed that the comment did not necessitate any changes to the Draft EIR.

Many comments focus on the relative merits of the proposed project (that is, question the validity of the proposed project) or express support or opposition for the proposed project (or elements of the project), and do not comment on the adequacy or accuracy of the data, analysis, and conclusions of the Draft EIR. As required by CEQA, this Draft EIR evaluates the impact of the proposed action and does not—and need not—substantiate the reason for the action. While all of the information contained in this RTC document will be considered by the decision makers as part of their decision to approve, modify, or disapprove the proposed project, comments unrelated to the environmental analysis are considered independent of the decision to certify the EIR. Where responses are provided for comments that are unrelated to the environmental analysis, they are provided for informational purposes only.

The decision to certify the EIR is outlined in CEQA Guidelines Section 15090, which requires that the decision-making body certify that the Final EIR: (1) has been completed in compliance with CEQA; (2) has been presented to the decision-making body of the lead agency and the decision-making body reviewed and considered the information contained in the Final EIR prior to approving the project; and (3) reflects the lead agency's independent judgment and analysis.

None of the comments, responses, or additional information presented in this RTC or included in the EIR present significant new information, which is defined in CEQA Guidelines Section 15088.5 as a new significant environmental impact; a substantial increase in the severity of an environmental impact; a feasible project alternative or mitigation measure considerably different from others previously analyzed that would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it; or the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded (*Mountain Lion Coalition v. Fish and Game Com.* (1989) 214 Cal.App.3d 1043). The information presented herein and revisions to the EIR add clarity or provide minor modifications to the EIR that do not change the conclusions. Thus, recirculation pursuant to CEQA (California PRC Section 21092.1) and the CEQA Guidelines (14 CCR Section 15088.5) is not required. Further, while revisions to the Draft EIR text have been proposed in this RTC document, none of the revisions change any of the conclusions in the Draft EIR and do not constitute significant new information, as defined above, which requires recirculation of the Draft EIR.

Table 4-1 Topical List of Comment Letters Received					
<i>RTC Comment/ Response No.</i>	<i>RTC Comment/Response Title</i>	<i>RTC Section No.</i>	<i>RTC Section Name</i>	<i>RTC Page No. of Comment</i>	<i>RTC Page No. of Response</i>
General [G]					
Comment G-1	Data that the Natural Areas support a "substantial amount of outdoor recreation"	4.A.1	General Comments on SNRAMP and the Draft EIR	4-13	4-13
Comment G-2	Draft EIR should acknowledge the current areas already set aside for native plant habitats	4.A.1	General Comments on SNRAMP and the Draft EIR	4-15	4-15
Comment G-3	Previous Natural Areas Program actions	4.A.1	General Comments on SNRAMP and the Draft EIR	4-16	4-19
Comment G-4	Financial considerations for implementation of SNRAMP	4.A.1	General Comments on SNRAMP and the Draft EIR	4-25	4-29
Comment G-5	Impacts of Natural Areas access restrictions on social fabric of San Francisco	4.A.1	General Comments on SNRAMP and the Draft EIR	4-30	4-31
Comment G-6	Impacts on Natural Areas from poor maintenance	4.A.1	General Comments on SNRAMP and the Draft EIR	4-32	4-34
Comment G-7	Prohibition on use of artificial turf	4.A.1	General Comments on SNRAMP and the Draft EIR	4-35	4-36
Comment G-8	Co-existence of sensitive species and golf	4.A.1	General Comments on SNRAMP and the Draft EIR	4-36	4-36
Comment G-9	Need for a recirculated or subsequent project-specific Draft EIR	4.A.2	CEQA Process	4-36	4-37
Comment G-10	Public outreach and Draft EIR public review process	4.A.2	CEQA Process	4-39	4-50
Comment G-11	Draft EIR is adequate, accurate, and complete	4.A.2	CEQA Process	4-54	4-57
Comment G-12	Objectivity of the EIR	4.A.2	CEQA Process	4-58	4-60
Comment G-13	Sharp Park analysis piecemealed regarding sea wall and golf course redesign	4.A.2	CEQA Process	4-61	4-62
Comment G-14	Historic Preservation Commission review of future project under the National Environmental Policy Act	4.A.2	CEQA Process	4-64	4-64
Comment G-15	GGNRA activities (unrelated to the SNRAMP)	4.A.3	Dog Play Areas	4-64	4-65
Comment G-16	Dog problems result from lack of monitoring, lack of enforcement of existing leash laws, and lack of responsibility from dog owners	4.A.3	Dog Play Areas	4-67	4-68

Table 4-1 Topical List of Comment Letters Received					
<i>RTC Comment/ Response No.</i>	<i>RTC Comment/Response Title</i>	<i>RTC Section No.</i>	<i>RTC Section Name</i>	<i>RTC Page No. of Comment</i>	<i>RTC Page No. of Response</i>
Comment G-17	Impacts of people within Natural Areas	4.A.3	Dog Play Areas	4-69	4-69
Comment G-18	Disagree that dog walkers should be limited to seven dogs	4.A.3	Dog Play Areas	4-71	4-71
Comment G-19	Support for maintaining or expanding amount of dog play areas/opposition to reducing DPAs	4.A.3	Dog Play Areas	4-72	4-88
Comment G-20	Support for reduced dog play areas as proposed in the SNRAMP	4.A.3	Dog Play Areas	4-90	4-91
Comment G-21	No dog group advisory involvement for the Natural Areas Program	4.A.3	Dog Play Areas	4-91	4-92
Comment G-22	Recreation and Park Department process for closing dog play areas	4.A.3	Dog Play Areas	4-92	4-92
Comment G-23	Prohibition on new dog play areas	4.A.3	Dog Play Areas	4-93	4-93
Comment G-24	Data on disturbance to breeding birds at Lake Merced dog play area	4.A.3	Dog Play Areas	4-95	4-95
Comment G-25	Analysis of dog impacts related to plants, wildlife, and erosion	4.A.3	Dog Play Areas	4-96	4-106
Comment G-26	Social impacts of dog ownership and dog play areas access restrictions	4.A.3	Dog Play Areas	4-109	4-114
Project Description [PD]					
Comment PD-1	General support for the project	4.B.1	Support for the Project	4-116	4-122
Comment PD-2	Support protecting the Golden Gate Park oak woodlands	4.B.1	Support for the Project	4-122	4-122
Comment PD-3	General opposition to the project	4.B.2	Opposition to the Project	4-123	4-132
Comment PD-4	Opposition to habitat restoration activities	4.B.2	Opposition to the Project	4-133	4-139
Comment PD-5	Native plant restoration versus providing more recreational areas	4.B.2	Opposition to the Project	4-141	4-141
Comment PD-6	Opposition to the proposed public access restrictions	4.B.2	Opposition to the Project	4-142	4-145
Comment PD-7	Opposition to reduction of Bernal Hill dog play area	4.B.2	Opposition to the Project	4-146	4-148
Comment PD-8	Opposition to reduction of McLaren Park dog play area	4.B.2	Opposition to the Project	4-149	4-149
Comment PD-9	Decommissioning of trails	4.B.3	SNRAMP Goals	4-150	4-151
Comment PD-10	Goals and objectives of the proposed project	4.B.3	SNRAMP Goals	4-153	4-155
Comment PD-11	Goals and implementation of the Natural Areas Program	4.B.3	SNRAMP Goals	4-157	4-159

Table 4-1 Topical List of Comment Letters Received					
<i>RTC Comment/ Response No.</i>	<i>RTC Comment/Response Title</i>	<i>RTC Section No.</i>	<i>RTC Section Name</i>	<i>RTC Page No. of Comment</i>	<i>RTC Page No. of Response</i>
Comment PD-12	Recommend removing Sharp Park and Laguna Salada from the SNRAMP	4.B.4	Proposed Modifications to Sharp Park	4-160	4-168
Comment PD-13	Proposed actions for Sharp Park	4.B.4	Proposed Modifications to Sharp Park	4-173	4-175
Comment PD-14	Support the configuration and continued operation of the Sharp Park Golf Course	4.B.4	Proposed Modifications to Sharp Park	4-184	4-185
Comment PD-15	Support limiting Sharp Park activities to controlling invasive species, reintroducing native species, and exclusion of dogs in wetlands	4.B.4	Proposed Modifications to Sharp Park	4-186	4-186
Comment PD-16	Proposed actions for Bayview Park	4.B.5	Proposed Modifications to Other Natural Areas	4-186	4-187
Comment PD-17	Proposed actions for Glen Park	4.B.5	Proposed Modifications to Other Natural Areas	4-187	4-187
Comment PD-18	Opposition to any habitat restoration at Glen Park that destroys coyote habitat	4.B.5	Proposed Modifications to Other Natural Areas	4-188	4-188
Comment PD-19	Proposed actions for Lake Merced	4.B.5	Proposed Modifications to Other Natural Areas	4-188	4-189
Comment PD-20	Proposed actions for Mount Davidson	4.B.5	Proposed Modifications to Other Natural Areas	4-189	4-192
Comment PD-21	Proposed actions for Pine Lake	4.B.5	Proposed Modifications to Other Natural Areas	4-195	4-195
Comment PD-22	Proposed actions for Tank Hill	4.B.5	Proposed Modifications to Other Natural Areas	4-196	4-196
Comment PD-23	The SNRAMP should consider options to control off-leash dog use other than closing dog play areas	4.B.6	Other Proposed Modifications	4-197	4-198
Comment PD-24	Specificity about which dog-related activities would be allowed in specific areas and locations	4.B.6	Other Proposed Modifications	4-200	4-200
Comment PD-25	Employ adaptive management for dog-related damage to native grassland and wildflower areas	4.B.6	Other Proposed Modifications	4-201	4-201
Comment PD-26	Coordinate management actions with adjacent open space managers	4.B.6	Other Proposed Modifications	4-202	4-202

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Comment PD-27	Recreation activities should include community stewardship	4.B.6	Other Proposed Modifications	4-202	4-203
Comment PD-28	Identify long-term, sustainable solutions of wetland protection and restoration	4.B.6	Other Proposed Modifications	4-203	4-203
Comment PD-29	Management action based on vegetation type	4.B.6	Other Proposed Modifications	4-204	4-204
Comment PD-30	Request that Mount Davidson be removed from the SNRAMP if the Maximum Recreation Alternative is not adopted	4.B.6	Other Proposed Modifications	4-204	4-205
Comment PD-31	Success of existing habitat restoration efforts should be evaluated	4.B.6	Other Proposed Modifications	4-205	4-206
Comment PD-32	Native restoration should be allowed in unforested areas	4.B.6	Other Proposed Modifications	4-207	4-207
Comment PD-33	Maintenance of city parks	4.B.6	Other Proposed Modifications	4-208	4-209
Comment PD-34	Elimination of 18,000 trees	4.B.6	Other Proposed Modifications	4-210	4-210
Comment PD-35	Draft EIR inaccurately describes the acquisition date for Mori Point	4.B.7	Correction to Project Description	4-211	4-211
Plans and Policies [PP]					
Comment PP-1	Consistency with plans and policies	4.C	Plans and Policies [PP]	4-212	4-212
Land Use and Land Use Planning [LU]					
Comment LU-1	Applicability of Pacifica Logging Ordinance and San Mateo County Tree Ordinance	4.D.1	Land Use and Land Use Planning [LU]	4-212	4-213
Comment LU-2	Effects on existing community	4.D.1	Land Use and Land Use Planning [LU]	4-214	4-214
Comment LU-3	Effects on existing character	4.D.1	Land Use and Land Use Planning [LU]	4-214	4-215
Comment LU-4	Applicability of San Francisco Urban Forestry and Landmark Tree Ordinances	4.D.1	Land Use and Land Use Planning [LU]	4-216	4-216
Aesthetics [AE]					
Comment AE-1	Aesthetic impacts of tree removal	4.D.2	Aesthetics [AE]	4-218	4-219
Comment AE-2	Aesthetic impacts of brush piles and brown vegetation	4.D.2	Aesthetics [AE]	4-222	4-223
Comment AE-3	Tree removal simulations	4.D.2	Aesthetics [AE]	4-224	4-224

Table 4-1 Topical List of Comment Letters Received					
RTC Comment/ Response No.	RTC Comment/Response Title	RTC Section No.	RTC Section Name	RTC Page No. of Comment	RTC Page No. of Response
Comment AE-4	Impacts of fence on Sharp Park berm	4.D.2	Aesthetics [AE]	4-225	4-226
Comment AE-5	Analysis of proposed tree management at Grandview Park	4.D.2	Aesthetics [AE]	4-227	4-227
Comment AE-6	Impacts of poor maintenance	4.D.2	Aesthetics [AE]	4-229	4-230
Cultural and Paleontological Resources [CP]					
Comment CP-1	Support determination that Sharp Park Golf Course is a historical resource	4.D.3	Cultural and Paleontological Resources [CP]	4-232	4-240
Comment CP-2	Opposition or uncertainty about determination that Sharp Park Golf Course is a historic resource	4.D.3	Cultural and Paleontological Resources [CP]	4-240	4-246
Comment CP-3	Agree with significant impacts and mitigation measures regarding the Sharp Park Golf Course Historical Resource	4.D.3	Cultural and Paleontological Resources [CP]	4-249	4-251
Comment CP-4	Disagree with significant impacts and mitigation measures regarding the Sharp Park Golf Course Historical Resource	4.D.3	Cultural and Paleontological Resources [CP]	4-252	4-255
Comment CP-5	Modifications to mitigation measures	4.D.3	Cultural and Paleontological Resources [CP]	4-259	4-259
Comment CP-6	Research recommendations for archaeological resources analysis	4.D.3	Cultural and Paleontological Resources [CP]	4-260	4-262
Comment CP-7	Preservation of the Sharp Park Golf Course	4.D.3	Cultural and Paleontological Resources [CP]	4-263	4-263
Comment CP-8	Impacts of tree removal on historic Mount Davidson Area	4.D.3	Cultural and Paleontological Resources [CP]	4-264	4-265
Comment CP-9	Inadequate/Incomplete HRER for Mount Davidson	4.D.3	Cultural and Paleontological Resources [CP]	4-266	4-270
Transportation and Circulation [TR]					
Comment TR-1	Impacts of driving if more dog play areas are closed	4.D.4	Transportation and Circulation [TR]	4-278	4-279
Comment TR-2	Request Lake Merced Dog play area visitor use data to verify whether an increase in traffic would be minimal	4.D.4	Transportation and Circulation [TR]	4-279	4-280

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Noise [NO]					
Comment NO-1	Permanent noise impacts of tree removal	4.D.5	Noise [NO]	4-281	4-281
Air Quality [AQ]					
Comment AQ-1	Increased pollution from tree removal activities	4.D.6	Air Quality [AQ]	4-283	4-283
Greenhouse Gas Emissions [GG]					
Comment GG-1	Climate change analysis of vegetation changes is insufficient and inaccurate	4.D.7	Greenhouse Gas Emissions [GG]	4-285	4-297
Comment GG-2	Draft EIR ignores changes to San Francisco's climate	4.D.7	Greenhouse Gas Emissions [GG]	4-302	4-303
Wind and Shadow [WS]					
Comment WS-1	Analysis of wind impacts from tree removal	4.D.8	Wind and Shadow [WS]	4-304	4-309
Comment WS-2	Disagree that all tree removal will have less than significant effects on wind	4.D.8	Wind and Shadow [WS]	4-310	4-310
Recreation [RE]					
Comment RE-1	Actual number of dog play areas is 29, not 19, and total acreage of DPAs is 120 acres, including DPAs outside of the Natural Areas	4.D.9	Recreation [RE]	4-311	4-311
Comment RE-2	Characterization of dog play area moratorium	4.D.9	Recreation [RE]	4-312	4-313
Comment RE-3	Use GGNRA estimate of closing 90% of off-leash lands for cumulative analysis	4.D.9	Recreation [RE]	4-317	4-319
Comment RE-4	Address increase in passive recreation for cumulative analysis	4.D.9	Recreation [RE]	4-320	4-320
Comment RE-5	Consider adding holes to the Sharp Park Golf Course east of Highway 1	4.D.9	Recreation [RE]	4-321	4-321
Comment RE-6	Replace the removed hole at the Sharp Park Golf Course to maintain 18 holes	4.D.9	Recreation [RE]	4-321	4-322
Comment RE-7	If Bernal Hill and McLaren Park are closed, remaining dog play area land would be less suitable	4.D.9	Recreation [RE]	4-322	4-323
Comment RE-8	Impacts resulting from restrictions on recreational access	4.D.9	Recreation [RE]	4-323	4-324
Comment RE-9	Impacts on recreation from planting threatened and endangered species	4.D.9	Recreation [RE]	4-326	4-329
Comment RE-10	Recreational analysis related to trails	4.D.9	Recreation [RE]	4-330	4-337
Comment RE-11	Impacts of removing benches and recreational amenities	4.D.9	Recreation [RE]	4-340	4-340

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Comment RE-12	SNRAMP proposals for park access	4.D.9	Recreation [RE]	4-340	4-341
Comment RE-13	Effect of the reduction of DPAs on other DPAs in terms of recreational capacity	4.D.9	Recreation [RE]	4-342	4-347
Biological Resources [BI]					
Comment BI-1	Consider adding California Clapper Rail to Table 9	4.D.10	Biological Resources [BI]	4-350	4-351
Comment BI-2	Corrections to permitting process	4.D.10	Biological Resources [BI]	4-354	4-354
Comment BI-3	San Francisco sightings of Mission blue butterfly	4.D.10	Biological Resources [BI]	4-356	4-356
Comment BI-4	Sharp Park restoration and the San Francisco Garter Snake Recovery Plan	4.D.10	Biological Resources [BI]	4-356	4-357
Comment BI-5	Laguna Salada and Horse Stable Pond dredging effects on habitats	4.D.10	Biological Resources [BI]	4-358	4-358
Comment BI-6	Adequacy of Sharp Park sensitive-species analysis	4.D.10	Biological Resources [BI]	4-359	4-359
Comment BI-7	Impacts of lagoon drainage on sediment and water quality	4.D.10	Biological Resources [BI]	4-361	4-365
Comment BI-8	Cost of off-site disposal of dredged material	4.D.10	Biological Resources [BI]	4-382	4-382
Comment BI-9	Contamination from dog urine	4.D.10	Biological Resources [BI]	4-383	4-383
Comment BI-10	Role of fertilizers on lagoon wetlands	4.D.10	Biological Resources [BI]	4-384	4-384
Comment BI-11	SNRAMP use of native vs. nonnative/invasive plants in terms of habitat diversity and the ability to support native or sensitive species	4.D.10	Biological Resources [BI]	4-385	4-388
Comment BI-12	Tree removal at Mount Davidson	4.D.10	Biological Resources [BI]	4-390	4-391
Comment BI-13	Potential impacts of implementing the proposed habitat restoration and other management and maintenance actions on biological resources	4.D.10	Biological Resources [BI]	4-393	4-397
Comment BI-14	Mitigation measures should include 30-day notice prior to any tree removal or trail closure	4.D.10	Biological Resources [BI]	4-400	4-400
Comment BI-15	Effects of retaining nonnative and/or invasive species (including blue gum eucalyptus) on native habitats	4.D.10	Biological Resources [BI]	4-401	4-402
Comment BI-16	California Red Legged Frogs in Laguna Salada	4.D.10	Biological Resources [BI]	4-405	4-405
Comment BI-17	Disagree with Draft EIR identification of feral geese	4.D.10	Biological Resources [BI]	4-406	4-406
Comment BI-18	Scrub habitat should be clearly defined	4.D.10	Biological Resources [BI]	4-407	4-407

Table 4-1 Topical List of Comment Letters Received					
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Comment BI-19	Impacts and associated mitigation for wetlands and other coastal resources	4.D.10	Biological Resources [BI]	4-408	4-408
Comment BI-20	Draft EIR does not address impacts to common wildlife	4.D.10	Biological Resources [BI]	4-409	4-409
Comment BI-21	Biodiversity would decrease with removal of plants and planting of native coastal dune plants	4.D.10	Biological Resources [BI]	4-410	4-410
Comment BI-22	Distinction regarding native and nonnative predators	4.D.10	Biological Resources [BI]	4-411	4-411
Comment BI-23	Feral cat and predator control	4.D.10	Biological Resources [BI]	4-412	4-415
Comment BI-24	Distinction between native and nonnative species and invasive species	4.D.10	Biological Resources [BI]	4-417	4-420
Comment BI-25	Extent of wetlands filled for the conversion of marsh to fairways	4.D.10	Biological Resources [BI]	4-423	4-424
Comment BI-26	Coastal development permit requirements	4.D.10	Biological Resources [BI]	4-428	4-428
Comment BI-27	Glossary of terms and definitions	4.D.10	Biological Resources [BI]	4-430	4-431
Comment BI-28	SNRAMP does not address monitoring of native species	4.D.10	Biological Resources [BI]	4-433	4-434
Comment BI-29	Effects of previous Natural Areas Program projects on the Mission blue butterfly	4.D.10	Biological Resources [BI]	4-434	4-435
Comment BI-30	Impacts related to the removal of nonnative trees and invasive vegetation	4.D.10	Biological Resources [BI]	4-436	4-437
Comment BI-31	Native vegetation planting impacts on ecosystems and landscapes	4.D.10	Biological Resources [BI]	4-439	4-439
Comment BI-32	Effects on nesting birds	4.D.10	Biological Resources [BI]	4-440	4-441
Comment BI-33	SNRAMP proposals for tree replacement	4.D.10	Biological Resources [BI]	4-441	4-457
Comment BI-34	Provide square footage and percentages of trees to be removed	4.D.10	Biological Resources [BI]	4-466	4-467
Comment BI-35	Discuss brush pile creation where tree trimming or removal is planned	4.D.10	Biological Resources [BI]	4-469	4-469
Comment BI-36	Replacing nonnative vegetation with more appropriate native vegetation is self-contradicting	4.D.10	Biological Resources [BI]	4-470	4-470
Geology and Soils [GE]					
Comment GE-1	Erosion control measures should be site-appropriate, certified weed free, and composed of natural fiber	4.D.11	Geology and Soils [GE]	4-472	4-472
Comment GE-2	Drifting sand impacts and mitigation measures	4.D.11	Geology and Soils [GE]	4-473	4-474
Comment GE-3	Erosion impacts from habitat restoration and/or tree removal	4.D.11	Geology and Soils [GE]	4-475	4-483

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Hydrology and Water Quality [HY]					
Comment HY-1	Drainage issues and downstream flooding from tree removal activities	4.D.12	Hydrology and Water Quality [HY]	4-485	4-486
Comment HY-2	Sea level rise at Laguna Salada	4.D.12	Hydrology and Water Quality [HY]	4-490	4-493
Comment HY-3	Analysis of wetland hydrology, sediment and water quality, and dewatering activities	4.D.12	Hydrology and Water Quality [HY]	4-497	4-497
Comment HY-4	Effects of Sharp Park Tree Removal Activities within the Coastal zone	4.D.12	Hydrology and Water Quality [HY]	4-498	4-498
Comment HY-5	Dredging Impacts on Water Quality (Salinity Assessment, Water Budget Model, and Storm Response Modeling)	4.D.12	Hydrology and Water Quality [HY]	4-499	4-501
Comment HY-6	Practices contributing to algal blooms	4.D.12	Hydrology and Water Quality [HY]	4-503	4-503
Hazards and Hazardous Materials [HZ]					
Comment HZ-1	Use of herbicides/pesticides by the Natural Areas Program	4.D.13	Hazards and Hazardous Materials [HZ]	4-504	4-531
Comment HZ-2	Public safety impacts from closure and relocation of dog play areas	4.D.13	Hazards and Hazardous Materials [HZ]	4-544	4-544
Comment HZ-3	Concerns regarding contaminated sites	4.D.13	Hazards and Hazardous Materials [HZ]	4-545	4-545
Comment HZ-4	Disagree with Draft EIR explanation of vegetation and fire hazards	4.D.13	Hazards and Hazardous Materials [HZ]	4-547	4-557
Comment HZ-5	Disagree that all project alternatives will have less than significant effects from pesticide use	4.D.13	Hazards and Hazardous Materials [HZ]	4-560	4-560
Alternatives [AL]					
Comment AL-1	Support the No Project Alternative	4.E.1	No Project Alternative	4-561	4-562
Comment AL-2	Inadequate description of Maximum Restoration Alternative	4.E.2	Maximum Restoration Alternative	4-562	4-563
Comment AL-3	Maximum Restoration Alternative should restore all of Sharp Park Golf Course	4.E.2	Maximum Restoration Alternative	4-564	4-565
Comment AL-4	Support the Maximum Restoration Alternative	4.E.2	Maximum Restoration Alternative	4-566	4-566
Comment AL-5	Opposition to the Maximum Restoration Alternative	4.E.2	Maximum Restoration Alternative	4-567	4-568

Table 4-1 Topical List of Comment Letters Received					
<i>RTC Comment/ Response No.</i>	<i>RTC Comment/Response Title</i>	<i>RTC Section No.</i>	<i>RTC Section Name</i>	<i>RTC Page No. of Comment</i>	<i>RTC Page No. of Response</i>
Comment AL-6	At Mount Davidson, use cypress, cedar, and pine trees	4.E.2	Maximum Restoration Alternative	4-568	4-569
Comment AL-7	Support for Maximum Recreation Alternative	4.E.3	Maximum Recreation Alternative	4-571	4-572
Comment AL-8	Support the Maintenance Alternative	4.E.4	Maintenance Alternative	4-573	4-585
Comment AL-9	Support minimum activity	4.E.4	Maintenance Alternative	4-586	4-587
Comment AL-10	Environmentally Superior Alternative	4.E.5	Environmentally Superior Alternative	4-587	4-595
Comment AL-11	Nondredging alternatives for Sharp Park	4.E.6	Alternatives Considered but Rejected	4-596	4-600
Comment AL-12	Choosing feasible alternatives over the proposed project	4.E.6	Alternatives Considered but Rejected	4-605	4-605
Comment AL-13	Propose alternative of reducing, redirecting, or shutting down the Natural Areas Program	4.E.6	Alternatives Considered but Rejected	4-605	4-606

4.A GENERAL COMMENTS [G]

This section addresses general comments on the SNRAMP or the Draft EIR, including comments in opposition to, or in favor of, the proposed project, comments pertaining to the CEQA process, glossary, and definitions presented in the Draft EIR, and other comments on the Draft EIR that do not explicitly relate to, or would not substantially affect, the analysis contained in the Draft EIR.

4.A.1 General Comments on SNRAMP and the Draft EIR

Comment G-1 Data that the Natural Areas support a “substantial amount of outdoor recreation”

The response to Comment G-1 addresses all or part of the following individual comment:

NPS-1-07

- Pg. 252: We would appreciate receiving any user data collected in preparation of this draft EIR that underlies the statement that the natural areas support a “substantial amount of outdoor recreation.” The City submitted comments on the GGNRA Dog Management Plan/DEIS asking that we consider the re-distributional effects of closing areas, and noted that the City would provide visitor information to this effect. User data that documents the number of visitors (and dog walkers) currently using these areas will help us address this comment. [NPS-1-07]

Response G-1

This comment requests data supporting the statement that the Natural Areas support a “substantial amount of outdoor recreation” and also requests visitor use data. The response below provides the requested data to the extent possible.

While SFRPD does not have specific data or user counts for the outdoor recreation usage by visitors to the Natural Areas for all recreation categories, regular use of the trails and other passive areas, for a variety of recreational uses, such as dog-walking, is evident through general observation. While usage levels vary from one area to another, the Natural Areas, which make up 1,107 acres of SFRPD’s 4,113 acres of total recreation and open spaces areas (with 3,100 acres located in the City of San Francisco), support a substantial amount of outdoor recreational activities. As reflected on SNRAMP pp. 3-13 and 3-14, Natural Areas are used extensively by residents and visitors of San Francisco for walking, hiking, running, nature watching, dog walking, and other passive recreational activities.⁹ All Natural Areas provide easy trail-walking opportunities, and most

⁹ Passive recreation—Recreation that occurs in a natural setting and that requires minimal site development or facilities. Under passive recreation, the importance of the environment or setting for the activities is greater than in developed or active recreation settings.

provide views of the city. The larger regional parks, such as Glen Canyon Park and McLaren Park, also provide hiking opportunities in areas of moderate to challenging steepness. Dog walking is popular in many Natural Areas. Key parks for wildlife observation are Bayview Park, McLaren Park, Mount Davidson, Glen Canyon Park, and Lake Merced. Stewardship and volunteering also are popular recreational activities that occur in Natural Areas. Approximately 15 stewardship groups work regularly restoring Natural Areas under the guidance of the Natural Areas Program (NAP).¹⁰ Thousands of volunteer hours are spent each year enhancing natural and recreational features in Natural Areas. Development of site-stewardship and recreational uses compatible with natural resource protection are two of the main goals of the SNRAMP.

In 2004, SFRPD developed a Recreation Assessment¹¹ in order to evaluate community program and facility needs. As part of this assessment, a statistically significant number of households (1,035) were surveyed,¹² and 61 percent of respondents visit Natural Areas for some form of recreation.

In terms of recreational use of the Dog Play Areas (DPAs), in 2009 and 2011, the SFRPD not only conducted dog use counts at numerous dog parks throughout the city, but also specifically within the Natural Areas (Bernal Hill, McLaren Park, Lake Merced,¹³ Buena Vista, Corona Heights, and Pine Lake). The 2009 and 2011 dog use count data is included in this EIR as new Appendix K (Dog Use Count Data: 2009 and 2011). The dog-use counts revealed that an average of 66 dogs and 38 owners use the parks on an hourly basis, excluding Lake Merced, which only had one dog (and one owner) use the park over the survey time periods. The survey time periods vary by park, and specific information regarding the survey dates and time periods are provided in Chapter 5, Draft EIR Revisions, "new" EIR Appendix K, which is provided on RTC p. 5-69. Based on the total dogs recorded over the survey time period, the park with the highest total recorded dog use was Pine Lake (with 122 dogs), and the park with the lowest total recorded dog use was Lake Merced (with 1 dog). The remaining Natural Area parks (Bernal Hill, McLaren Park, Buena Vista, and Corona Heights) had a combined total of 112 recorded dogs over the survey time period, with counts ranging from 19 (McLaren Park) to 32 (Corona Heights).

In summary, due to high urban density and limited park areas in San Francisco, the properties managed by the SFRPD, including the Natural Areas, are highly valued and utilized for their recreational opportunities.

¹⁰ The Natural Areas Program, or NAP, is now referred to as the Natural Resources Division; however, to maintain consistency between the Draft EIR and this RTC document, the term NAP will continue to be used.

¹¹ San Francisco Recreation and Park Department, *Recreation Assessment Report*, August 2004. This document (and all other documents cited in this report, unless otherwise noted), is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA, 94103, as part of Case File No. 2012.1427E 400.

¹² San Francisco Recreation and Park Department, *Recreation Assessment Report*, August 2004.

¹³ For Lake Merced, the dog counts were taken in 2011.

Refer also to Response RE-13, RTC p. 4-347, for a discussion of the impacts on other DPAs (in terms of recreational capacity) of the conversion of DPAs to on-leash dog areas, and refer to Response RE-1, RTC p. 4-311, for a discussion of the total number of dog parks available for on-leash, off-leash, or on-trail dog use in the city.

Comment G-2 Draft EIR should acknowledge the current areas already set aside for native plant habitats

The response to Comment G-2 addresses all or part of the following individual comment:

Lorenz-1-04

- Also, the plan does not recognize that the city of SF has already set aside huge areas for native plant habitats in the form of the San Francisco Peninsula Watershed. This needs to be acknowledged in the EIR. [Lorenz-1-04]

Response G-2

This comment requests acknowledgement that there are native plant habitats set aside as part of the San Francisco Peninsula Watershed.

The 23,000-acre Peninsula Watershed, to which the commenter refers, is located in central San Mateo County, south of the city and is not under the jurisdiction of the SFRPD, but rather the SFPUC, which is why it is not included in the SNRAMP. While areas of the Peninsula are set aside for open space, as are other areas within the Bay Area, the Peninsula Watershed Plan Final EIR does not identify a specific acreage for native plant restoration activities.

Irrespective of other native plant habitat restoration activities in other portions of the Bay Area, the Recreation and Open Space Element (ROSE) of the City's General Plan (updated in April 2014) requires the City to protect and enhance the biodiversity, habitat value, and ecological integrity of open spaces and encourage sustainable practices in the design and management of the City's open space system (Objective 4). The ROSE identifies four policies that are applicable to the City's natural areas: Policy 4.1: Preserve, protect and restore local biodiversity; Policy 4.2: Establish a coordinated management approach for designation and protection of natural areas and watershed lands; Policy 4.3: Integrate the protection and restoration of local biodiversity into open space construction, renovation, management and maintenance; and Policy 4.4: Include environmentally sustainable practices in construction, renovation, management and maintenance of open space and recreation facilities.¹⁴ Further, the protection of Natural Areas in San Francisco is also addressed in the City's *Sustainability Plan*¹⁵ and SFRPD's Strategic Plan¹⁶ under Strategy Four: Inspire Stewardship (Protect

¹⁴ San Francisco Planning Department, *Recreation and Open Space Element of the San Francisco General Plan*, April 2014. This document is available online at: <http://openspace.sfplanning.org/>, accessed on January 29, 2016.

¹⁵ City of San Francisco Commission on the Environment, *Sustainability Plan for the City of San Francisco*, 1997. This document is available online at: <http://sustainablecity.org/>, accessed on June 6, 2016.

and enhance San Francisco's precious natural resources through conservation, education, and sustainable land/facility management practices) and specifically through Objective 4.1: Conserve and strengthen natural resources and Objective 4.2: Increase biodiversity and interconnectivity on City parkland.

The proposed project does not involve converting areas outside of the Natural Areas managed by the SFRPD to native plant habitat (with exception of minor areas around the Laguna Salada wetland complex in Sharp Park), but instead seeks to improve and enhance those native plant communities within the Natural Areas.

Comment G-3	Previous Natural Areas Program actions
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The response to Comment G-3 addresses all or part of the following individual comments:

SFFA-3-12	SFPGA-3-11	WTPCC-1-09
Bowman-2-17	Kessler-1-09	Kessler-2-09

■ **1. The Natural Areas Program has violated California Fish & Game Code and the Migratory Bird Treaty Act**

The DEIR states that SNRAM is consistent with all federal and state laws governing the protection of biological resources. One of those laws is California Fish & Game Code 1600-1616 regarding the protection of fish and wildlife within "bodies of water of any natural river, stream or lake." These codes obligate those who are engaged in any "streambed alteration" to apply for a permit and "to propose reasonable project changes to protect the resource." (DEIR, page 274)

Islais Creek in Glen Canyon Park is such a water body which is protected by this law. Accordingly, the Natural Areas Program applied to California Fish & Game for a Streambed Alteration Permit in preparation for their project which began in November 2011. **The Natural Areas Program made the following commitment to mitigate harm to wildlife in Glen Canyon Park in its Streambed Alteration Permit:**

"It is the policy of RPD's Natural Areas Program that **no new projects will begin during the breeding season (December to May)**. Follow up work in previously cleared areas may be done during the breeding season, however, because areas will have been cleared previously. Wildlife will not likely be using these areas for breeding. This protocol has been effective in reducing impacts to breeding wildlife."

The Natural Areas Program began to destroy the nonnative vegetation in Glen Canyon Park in San Francisco in November 2011. In addition to destroying valuable habitat with chainsaws, they also sprayed herbicides. This destructive activity continued through winter and spring 2012 and cannot be dismissed as "follow-up work" on previously cleared areas.

¹⁶ San Francisco Recreation and Parks Department, *Strategic Plan FY 2016–2020*. This document is available online at: <http://sfrecpark.org/wp-content/uploads/RPD-Strategic-Plan-FY16-20.pdf>, accessed on June 6, 2016.

The San Francisco Forest Alliance (SFFA) protested this destructive project many times but it has continued unabated to as recently April 27, 2012, when they pruned trees and sprayed herbicides.

Earlier in April, SFFA learned from a public records request that this project violated a legal commitment to the California Department of Fish & Game. SFFA immediately brought this violation of NAP's commitment to the attention of the General Manager of the Recreation and Park Department. The head of the Natural Areas Program said that the violation was necessary because the grant funding for the project was about to expire. To avoid losing the funding for the project, the birds and animals of Glen Canyon Park were subjected to this destructive project during their breeding and nesting season.

SFFA brought this violation to the attention of the California Department of Fish & Game. Their regulations commit them to enforce the terms of the Streambed Alteration Permit, including the mitigation of potential harm to wildlife. Violations of the terms of the permit are subject to "civil penalties" according to the regulations: "A person who violates this chapter is subject to a civil penalty of not more than twenty-five thousand dollars (\$25,000) for each violation."

One month after informing California Department of Fish & Game of this violation, nothing seems to be done about it. In fact, several weeks after sending this information to Fish & Game, another episode of destruction occurred in Glen Canyon Park on April 27, 2012.

As the breeding/nesting season is also the season during which migratory birds are occupying their nests and the federal Migratory Bird Treaty Act "... also applies to the removal of nests occupied by migratory birds during the breeding season," (DEIR, page 273) we assume this law was also violated.

In other words, the legal commitments made by the Natural Areas Program to conduct the destructive phase of their project outside of the breeding and nesting season were not observed. Furthermore, no action was taken by California Fish & Game to stop this project when it was brought to their attention. The law is apparently ignored with impunity.

In addition to the violation of federal and state laws, the Natural Areas Program has also violated the commitments made in both the SNRAMP and the DEIR: "In compliance with the MBTA [Migratory Bird Treaty Act], the SFRPD would avoid harming or removing the nests of these species and any migratory bird species. Measure GR-4b (page 109) in the SNRAMP requires that vegetation management activities be conducted outside the breeding season (February 1 to August 31), unless these activities had already begun before the breeding season and had already removed nesting habitat or if a breeding bird survey was conducted prior to vegetation removal activities and had determined that no nesting birds were present." (DEIR, page 305)

The commitment to California Fish & Game in NAP's Streambed Alteration Permit and the commitment made in Measure GR-4B of SNRAMP are contradictory. These contradictions should be resolved by the final EIR: When is the breeding season? What evidence is there that a breeding bird survey was conducted prior to vegetation removal activities which took

place continuously from November 2011 to April 27, 2012? Is the mitigation required by the Streambed Alteration Permit consistent with the caveats of Measure GR-4b?

The final EIR is not in a position to reassure the public that the implementation of SNRAMP will not harm wildlife because the Natural Areas Program has violated the laws that theoretically protect wildlife. [SFFA-3-12]

- The EIR should contain a detailed description of the process which led to the design and selection of the proposed Sharp Park Restoration project. (a) Over the last several years, the City has performed extensive analyses (including the Sharp Park Conceptual Restoration Alternatives Report included as Appendix I) of the endangered species and associated issues at Sharp Park, and engaged in a comprehensive and public effort to analyze numerous alternatives to address those issues. That process resulted in the decision by the City to implement the Restoration project which is now addressed in the Draft EIR. However, the Draft EIR is largely silent regarding how the Restoration project came to be. The Final EIR should rectify this oversight by incorporating into the Project Description section a detailed description of the City studies and decision-making processes that resulted in the City's decision to implement the Restoration project now being analyzed. [SFPGA-3-11]
- We are also concerned that some habitat conversion is being done during breeding and nesting season. For example, NAP applied for a "streambed alteration" permit from the California Fish and Game Dept. for habitat conversion work to be done near Islais Creek in Glen Canyon. In the application, NAP clearly stated: "It is the policy of RPD's Natural Areas Program that no new projects will begin during the breeding season (December to May)." Similar commitments were made in the SNRAMP. However, NAP contractors used chainsaws and herbicides to destroy underbrush habitat in Glen Canyon in March and April, continuing work done sporadically since November 2011. This work took place throughout the breeding/nesting season, despite NAP's legal commitment to CA Fish and Game and in the SNRAMP to not do habitat work during breeding season. When people informed RPD management about this, during a meeting at McLaren Lodge, Lisa Wayne, the head of NAP, said the work was being done during the breeding/nesting season because the grant for the project was set to expire. In other words, NAP's decision on habitat conversion in Glen Canyon appeared to be motivated by financial considerations, not by any concerns about the wildlife and birds living there. [WTPCC-1-09]
- It is also disturbing that RPD has proceeded with implementing much of the SNRAMP plans prior to the completion of the DEIR, which doesn't seem to comply with CEQA. For example, 1) signs are already posted at the Natural Area entrances calling the entire Natural Area "sensitive habitat" and requiring visitors to "stay on the designated trails" and 2) the 2008 Park Bond Trail Restoration Program - \$4 million budget with about \$900,000 already spent - has already been used to start the SNRAMP proposed plans to decommission trails, erect permanent fencing, remove existing landscaping, and install new native plants. In addition in the Glen Canyon Creekside Trail Habitat Conservation Fund (9/13/10) (See *Attachment A*), RPD claims that the proposed project is "not related to any larger project, series of projects, or program", when in fact the project is directly implementing the SNRAMP proposed plans and altering the park land use. [Bowman-2-17]

- NAP was originally intended to preserve the few remnants of San Francisco's historical habitat, but the program has morphed into an empire that controls over one-quarter of all the city-managed parkland – land for which access is being limited by the NAP program in a city coping with more and more people. We have wonderful natural areas – forests, thickets and overgrown areas, which everyone loves as they are – they are truly natural – but they are being removed for NAP's program. NAP is actually harming the environment by destroying trees, established habitat, and established ecosystems which include our existing wildlife. NAP wants to recreate our environment as one of native grasses which might have existed in the area in 1776 – in very delimited spaces this seems fine, but they should not be taking over our parks which have evolved on all levels since that time. The grasses were native to a sand-dune ecology, but that is no longer the case within the city, and the grasses provide no protective habitat to the animals which now occupy these spaces – animals which are not on NAP's "specified" or "endangered" lists. There has been an alarmingly high rate of failure when "endangered" species have been introduced – this is because they are no longer suited to this environment which has evolved and changed since 1776. NAP is a political program, not a program based on science, and one which is hampering people's enjoyment and use of their parks.

We have now discovered that, for native plants, there is a huge issue of "sustainability" which has been totally overlooked by the NAP program: the Native Plants in fact cannot survive without artificial means of keeping them going, including huge amounts of human management and poisons to keep other growth down: this project is an absolute waste of resources. And the result is artificial museum gardens which preclude other uses of the parks – access to more and more areas is being restricted because of the NAP program. The very phrase "natural areas" is totally deceptive to the public – these are artificial creations.

If you want to look at areas which have been left totally bare because NAP ripped out what was there, look at the periphery of Pine Lake – the NAP program first began there 15 years ago and it is a mess. And now the lush growth in Glen Canyon is slowly and systematically being removed, NAP is turning a gem of a wilderness park – something that everyone wants retained – into a native grassland area, even removing and thinning truly-native willows and coyote brush. No one wants these parks turned into these artificial museum gardens except the NAP people themselves. Twin Peaks is sprayed with poisons every four months so that native plants can grow. More people that I speak to are for ending the NAP domination of our so-called "natural areas." [Kessler-1-09] [Kessler-2-09]

Response G-3

One of the comments asserts that SFRPD is violating CEQA by implementing elements of the 2006 SNRAMP before environmental review has been completed for the 2006 SNRAMP. Other comments question the scope of the parkland improvements under the management of the SFRPD. Another comment states that the NAP harms the environment, that previous restoration efforts have not been successful, and questions whether native plants are sustainable.

Compliance with CEQA

The Natural Areas Program is currently operating under the 1995 Management Plan and any actions the Natural Areas Program is currently undertaking is either a separate project, such as the 2008 and 2012 Clean and Safe Neighborhoods Park Bond or the Glen Canyon Trail Restoration Project, or under the authorization of the 1995 Management Plan. The 2008 Clean and Safe Neighborhoods Parks Bond and the Glen Canyon Trail Restoration Project referenced in the comment above is separate and independent of the 2006 SNRAMP, and underwent separate CEQA analyses as described below. All current actions are currently authorized by the 1995 Management Plan or separate environmental review. The proposed SNRAMP would provide a comprehensive program for the ongoing management and stewardship of Natural Areas, building upon the conceptual framework outlined in the 1995 Management Plan.

Previous Actions of the Natural Areas Program

Many of the commenters concerns relate to previous actions of the NAP, which are separate and independent from the 2006 SNRAMP. Nonetheless, a response has been provided for informational purposes. Further, as with all of the comments provided on this Draft EIR, they have been forwarded to the SFRPD staff and Commission for review and consideration.

These previous actions of the NAP, while independent of the 2006 SNRAMP, may include projects funded by the 2008 and 2012 San Francisco Clean and Safe Neighborhoods Bond. The 2008 General Obligation Bond (2008 Clean and Safe Neighborhoods Parks Bond) underwent CEQA review as part of Planning Department Case File No. 2007.1013E. The 2012 General Obligation Bond (2012 Clean and Safe Neighborhoods Parks Bond) underwent CEQA review as part of Case File No. 2011.1359E. The Glen Canyon Trail Restoration Project, referenced in the comment above was largely funded from the 2008 Clean and Safe Neighborhood Parks Bond, which underwent CEQA review under Planning Department Case File Nos 2007.1247E and 2010.0870E.

The 2008 Clean and Safe Neighborhood Parks Bond was a general obligation bond for improvements to parks owned and/or operated by the SFRPD and the Port of San Francisco. The 2012 San Francisco Clean and Safe Neighborhood Parks Bond, which is also a general obligation bond, would build on that precedent by delivering voter-approved parks and open-space recreation projects owned and/or operated by SFRPD or the Port of San Francisco. The projects identified in the 2008 and 2012 Clean and Safe Neighborhood Parks Bond are separate and independent from the SNRAMP; however, in the case of the 2012 Clean and Safe Neighborhood Parks Bond, some of the bond money is set aside for Citywide Parks improvements, which includes improvements to Golden Gate Park, McLaren Park, and Lake Merced Park. It is possible that some of these monies could be used for management actions and improvements proposed under the SNRAMP, but no physical improvements could be accomplished unless and until this EIR is certified by the Planning Commission.

The Glen Canyon Restoration Project, which is now substantially complete, repaired existing trails and steps, provided fencing for public safety, protected sensitive habitat areas, provided erosion control measures, restored native plants, and provided wayfinding signage. The existing trails were in poor condition and in need of restoration. The Glen Canyon Restoration Project improved safety, repaired retaining edges, addressed seeps and wet areas to improve pedestrian access, addressed invasive plant and hazardous tree removal, and enhanced the trail experience in Glen Canyon Park by retaining the rustic quality of the trail.¹⁷ The Planning Department's Office of Environmental Review completed its environmental review and the project received a categorical exemption under CEQA State Guidelines (Case no. 2010.0870E, 9/29/10, after which time conceptual design for this project was approved by the Recreation & Park Commission in August 2011).

2006 SNRAMP and Sharp Park Restoration Development Process

In response to a commenter's request that the EIR contain a description of the process that led to the design of the Sharp Park Restoration, the development of the SNRAMP occurred over almost 10 years, beginning in 1995 and initially culminating in the 2005 Draft SNRAMP. Development of the 2005 Draft SNRAMP consisted of numerous and extensive meetings with involvement of over 3,000 individuals. In June 2005, when the Draft SNRAMP was released for public review, three well-attended public workshops were held throughout the city. Outreach also included sending fliers to neighborhood groups and residents within 300 feet of all Natural Areas, the Mayor's Office of Neighborhood Groups, SFRPD's list of neighborhood groups, and other interested parties. Announcements were also posted at all Natural Area sites. An online survey was available for individuals and members of the public who were unable to attend in person. Feedback was received from approximately 2,700 members of the public and recommendations were received from three independent scientists. Further, several task forces, committees, and/or working groups were convened as part of the development of the SNRAMP, including the Natural Areas Program Citizen Advisory Committee, an ad hoc group that made recommendations on how to revise the plan, a Science Round Table group that reviewed the Alternatives Report for Sharp Park, and the Sharp Park Working Group. Scientists were members of these independent working groups, providing technical expertise and functioning in a peer review capacity. All of this input was considered during preparation of the 2006 Final Draft SNRAMP (or 2006 Public Review Draft), which was circulated for public review in February 2006. For clarity, the 2005 Draft SNRAMP was subject to scientific review and the 2006 Final (or public review) Draft was subject to public review.

Revisions to the Sharp Park Restoration Plan were also made in response to input from scientists and regulatory agencies. In fact, as previously mentioned, resource agencies, including the United States Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and the California Coastal Commission (CCC), have reviewed and provided input on the SNRAMP, the

¹⁷ <http://sfrecpark.org/project/glen-canyon-urban-trails-project/>, accessed on July 28, 2014.

Sharp Park Conceptual Restoration Alternatives Report, and, ultimately, the Draft EIR, which was first circulated for public review August 31, 2011 and again on April 27, 2012. The USFWS also prepared the Biological Opinion¹⁸ for the Sharp Park Pumphouse Project, with many of the conditions also applying to the proposed SNRAMP activities at Laguna Salada. Further, scientists commented on both the 2005 Draft SNRAMP and the 2011 SNRAMP Draft EIR, which provided another opportunity for technical review and input.

With respect to a formal scientific review, as stated on SNRAMP p. 1-10, three independent scientific reviews of the 2005 Draft SNRAMP were conducted in August 2005. Dr. Lynn Huntsinger¹⁹ and James W. Bartolome^{20, 21} reviewed the entire 2005 Draft SNRAMP and provided a detailed report to the SFRPD. The goal of the independent review was to assess the scientific basis for the SNRAMP and evaluate the goals, issues, and recommendations. Additionally, the reviewers were asked to determine if the 2005 Draft SNRAMP was feasible to implement and if implementation of the proposed management activities would result in the desired outcome. The review reached the following overall conclusions:

- The Plan was based on sound science and was a reasonable compromise between ideals, practicality, and competing uses.
- The management goals (conservation, restoration, education, stewardship, recreation, and monitoring) are consistently addressed throughout the Plan.
- The proposed actions and monitoring seemed generally feasible.

The review suggested revisions to the recommendations dealing with management of the urban forest understory, grasslands (see GR-3 in Section 5), and butterfly host plants (see GR-10). The general recommendations referenced by these comments have been revised and updated. The review also suggested minor changes to the Monitoring protocols (Section 7), which were implemented.

¹⁸ Letter from Susan K. Moore, Field Supervisor, United States Fish and Wildlife Service to Jane M. Hicks, Chief, Regulatory Division, United States Army Corps of Engineers, October 2, 2012.

¹⁹ Dr. Huntsinger holds a Ph.D. in Wildland Resource Science from the University of California, Berkeley; an M.S. in Rangeland Science from the University of California, Berkeley; and a B.A. in Chinese Studies (Modern History) from the University of California, San Diego. She is currently a Professor of Rangeland Ecology and Management at the University of California, Berkeley.

²⁰ Dr. Bartolome holds a Ph.D. in Wildlife Resource Science from the University of California, Berkeley and a B.A. in Biology from the University of California, Santa Barbara. He is currently a Professor of Graduate-level Education at the University of California, Berkeley.

²¹ Review: Significant Natural Resource Areas Management Plan, Lynn Huntsinger and James W. Bartolome, Submitted to the San Francisco Recreation and Parks Department, August 2005.

A second review was conducted by Roy A. Woodward, PhD.^{22, 23} Dr. Woodward made comments on and suggested edits to the text, particularly as it related to the Monitoring Plan and Protocols, which were implemented, as appropriate.

A third review was conducted by Peggy Fiedler, PhD.^{24, 25} Dr. Fiedler concluded that the Plan in general succeeded in its goals and “strikes a balance between natural resource protection and the needs of citizens in a highly urbanized, densely populated, highly ethnically diverse, overall well-educated area.” Dr. Fiedler made many comments regarding clarity, content, organization, editing, format, and consistency. To the extent possible, these clarity and organizational comments, as well as her specific technical comments, were incorporated.

Ultimately, all of the input from both scientists and regulatory agencies was considered and implemented, as appropriate, in the 2006 Final Draft SNRAMP, which was circulated for public review in February 2006.

Continued Access to Local Open Space and Recreational Areas

There is significant parkland and recreation and open space areas within the city, estimated as upwards of 5,800 acres, both under the control of the SFRPD, as well as under the control of other public entities, such as the Port of San Francisco, federal government (e.g., Presidio Trust or Golden Gate National Recreation Area), SFPUC, and University of California San Francisco (UCSF). SFRPD maintains 4,113 acres of total recreation and open space areas and within this total acreage, the Natural Areas comprise about 1,107 acres. Refer also to Response PD-6, RTC p. 4-145, Response G-5, RTC p. 4-31, and Response RE-8, RTC p. 4-324, for a further discussion of potential impacts associated with access restrictions.

Native Plants and Plant Removal

With respect to the sustainability of native plants, refer to Response G-2, RTC p. 4-15, and Response PD-11, RTC p. 4-159, for a discussion of the City’s policy guidance that supports the protection and maintenance of biodiversity within the City’s Natural Areas, including guidance

²² Dr. Woodward, Ph.D., CPESC, works with the California Department of Parks and Recreation in Sacramento, CA.

²³ Hand edits to 2005 SNRAMP text from Dr. Roy A. Woodward, Ph.D., Senior Environmental Scientist, Natural Resources Division, State of California, Department of Parks and Recreation, no date.

²⁴ Dr. Fiedler earned her B.A. from Harvard University and her Ph.D. from the University of California, Berkeley. She then joined the faculty at San Francisco State University (SFSU) where she was promoted to full Professor in 1997. While at SFSU she initiated the first Conservation Biology master’s degree program of its kind in the United States. In 2000, Dr. Fiedler left SFSU to work as an environmental consultant in rare plant protection and ecosystem restoration.

²⁵ Peer review of the Public Draft Significant Natural Resource Areas Management Plan, June 2005, Peggy L. Fieldler, Ph.D., Senior Scientist II/Associate, BBL Ecosystem Science and Restoration Services to Ms. Lisa Wayne, San Francisco Recreation and Parks, September 29, 2005.

provided in the City's *Sustainability Plan*²⁶ regarding the protection of Natural Areas in San Francisco. Refer also to Response BI-36, RTC p. 4-470, for a discussion of the temporary intervention and maintenance activities that are required for native species to become established.

One of the commenters questions whether the NAP is harming the environment by removing established trees, habitats, and ecosystems and also questions whether the removal of grasses would cause harm to species that use grassland as its habitat. Refer to Response BI-13, RTC p. 4-397, and Response BI-31, RTC p. 4-439, for a discussion of the impacts of removing vegetation, including impacts to common species, and refer to Response BI-15, RTC p. 4-402, for a discussion of the impacts of retaining nonnative vegetation and the relative benefits of removing nonnative vegetation.

Breeding and Nesting Season

With regard to the commenter's reference to activities at Glen Canyon Park, prior to undertaking the project in Glen Canyon Park in 2011-2012 that is referenced in the above comments, NAP staff conducted a breeding bird survey pursuant to the requirements of the MBTA and found no nesting birds in the area.

With respect to the commenter's concerns about when activities proposed under the SNRAMP would occur relative to the breeding and nesting season, the section on *Invasive Vegetation Removal* provided under Impact BI-2 on Draft EIR pp. 304 and 305 notes that "vegetation management activities would be conducted outside the breeding season for bird species (February 1 through August 31, as designated by CDFW), unless these activities had already begun before the breeding season and had already removed nesting habitat, or if a breeding bird survey was conducted prior to vegetation removal activities and had determined that no nesting birds were present". Other impacts on sensitive species resulting from implementation of the programmatic projects, as well as the proposed maintenance activities and the Sharp Park Restoration Project, are comprehensively analyzed in Impacts BI-2 through BI-6 provided on Draft EIR pp. 306 through 330, concluding, in all cases, that impacts would be reduced to a less-than-significant level with the implementation of the identified mitigation measures.

²⁶ City of San Francisco Commission on the Environment, *Sustainability Plan for the City of San Francisco*, 1997. This document is available online at: <http://sustainablecity.org/>, accessed on June 6, 2016.

Comment G-4	Financial considerations for implementation of SNRAMP
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The response to Comment G-4 addresses all or part of the following individual comments:

GGAS-1-11	MPIC-1-14	MPIC-2-06
WTPCC-1-14	Art-1-06	Bartley-1-04
Blum-1-03	Bowman-1-10	Cook-1-07
Delacroix-1-06	Fitzer-1-04	Fox-1-06
Freedman-1-02	Gomez-1-04	Hess-1-07
Johns-1-08	Jungreis-1-07	Lorenz-1-02
Ray-1-06	Rehling-1-03	Risk-1-06
Schlund-1-04	Shepard-A-1-03	Valente-1-10
Wade-1-03		

- Overall, Golden Gate Audubon endorses the Monitoring Program as written, but is concerned that the DEIR does not commit the City to fully executing or funding the Monitoring Program. (DEIR, at 94-95) Golden Gate Audubon strongly recommends that this section be improved to identify funding sources and state an affirmative commitment that monitoring will be conducted and that findings will be made available to the public (via reports or other means of sharing data) in a timely manner. This is of particular importance for the monitoring of special status species. [GGAS-1-11]
- Economic Factors. The DEIR lacks any cost estimate for implementing the SNRAMP and has no information about how it will be funded. It also does not address the potential impact of shifting resources such as park bond funds away from recreation and park maintenance/improvements to complete the SNRAMP. The substantial cost of removing the trees from Mt. Davidson will divert significant resources from providing what the MPIC considers a higher priority for resource use: basic maintenance of Mt. Davidson Park including litter and graffiti removal, forest and trail maintenance, and installation of benches and trail direction signage. [MPIC-1-14]
- The DEIR does not address the economic impact of the significant financial resources that would be diverted from SF Park and Recreation services to implement SNRAMP. There is no cost estimate for implementing the SNRAMP and no information about how it will be funded. It also does not address the potential impact of shifting resources, such as park bond funds, away from recreation and park maintenance and improvements in order to complete the SNRAMP. The substantial cost of removing the trees from Mt. Davidson will divert significant resources from providing what the MPIC considers a higher priority for resource use: basic maintenance of Mt. Davidson Park, including litter and graffiti removal, forest and trail upkeep, and installation of benches and trail direction signage. Ongoing costs for herbicide spraying, erosion control, replanting, and fencing are also not addressed. [MPIC-2-06]
- There are many tree maintenance issues around the City that need attention. The NAP funds would be put to much better use:
 - 1) getting the ivy out of all trees, as it will eventually strangle and kill all growth on the tree.

- 2) removing the fusarium from our remaining pine trees between November and February so that the pitch pine canker and the bark beetle do not spread. If the pines are fed with deep root fertilizer and the yellowing needles are removed, the pines will be much healthier and have longer lives.
 - 3) planting many more big beautiful trees that do well in our microclimate. [WTPCC-1-14]
- As SF's population continues to grow and more large housing developments are planned, demand for recreation and relaxing in our parks increases. The Natural Areas Program fences off the areas that they first denude then plant with insignificant / tiny dune plants to create their plant museums. Spending tax dollars to take away recreation areas from residents is outrageous. I want more Rec and Park gardeners hired and less staff positions paid to the Natural Areas Program, who are intent on removing the lush vegetation that I enjoy in our parks. [Art-1-06] [Cook-1-07] [Delacroix-1-06] [Fox-1-06] [Jungreis-1-07] [Ray-1-06]
 - Considering long term costs and the current budget: Today San Francisco, like all U.S. municipalities, is suffering from the effects of a national recession. This will not likely be the case in five or ten years but maximizing the efficiency of available staff should always be a goal of long term planning. One way to maximize that efficiency is through a reduction of long term maintenance burden. Trees in a city require professional arborists for safety reasons and are much more expensive to maintain than grasslands or coastal chaparral in the long term. Most local native plants, once well established, require less or no irrigation and little or at least less maintenance. As has been demonstrated motivated volunteers can make a huge, cost-effective, difference on small scale restorations using simple tools. [Bartley-1-04]
 - Some of the unresolved conflicts surrounding Sharp Park include:
 - > failure of RPD to deal with the financial losses of Sharp Park Golf Course which are being underwritten by San Francisco taxpayers even as San Mateo County has offered to help manage the Golf Course and take on certain responsibilities to alleviate the situation.
 - > improper redirection of limited RPD financial resources from San Francisco located RPD parks to shore up the losses of Sharp Park, in San Mateo County.
 - > Failure by RPD to implement sound financial restraint and management practices at Sharp Park in a way that makes it financially self-sustainable.
 - > Potential mis-management of taxpayer funds by taking funds from one RPD account, redirecting it to the Sharp Park Golf Course, and not reimbursing the original RPD account.
 - > Failure to consider the increased maintenance costs it will take to stave off sea rise which will further damage the park and the endangered species and who will pay for the increased maintenance cost
 - > Failure to ascertain if the citizens and taxpayers of San Francisco are willing to allow RPD to continue to redirect limited funds to continue to underwrite a failed San Mateo golf

experience at the cost of shortchanging San Francisco City parks even further than they are today. [Blum-1-03]

- In addition, the NAP is not free. Just removing and replanting some 15,000 trees in Sharp Park has to be a significant cost and yet no financial information is provided. I am personally quite appalled that large amounts of time and money are spent on removing healthy trees and vegetation when toilets are non-existent (e.g. Stern Grove) or badly maintained (e.g. Lake Merced), and the city is cutting other critical services. No plan should be complete without a financial analysis to evaluate the opportunity costs. [Bowman-1-10]
- For 10 years now, GGNRA has acted unilaterally and spent millions of dollars on a misguided plan that will require millions of dollars through the hiring of park rangers and police. I, for one, think this money would be more wisely spent on our schools. [Fitzer-1-04]
- Has the City no better use for taxpayer dollars during tough times than cutting down perfectly healthy trees to take us back to 1776? [Freedman-1-02]
- 3. Cost

It is difficult to understand the logic of this reality: Throughout our City, young trees are being planted by our City workers in median strips, etc. as part of beautifying San Francisco. At the same time, plans are underway to remove thousands of healthy full grown trees in our parks. How does this make fiscal sense, especially during our current economic climate? City Departments are

> Consider the cost of implementing this extensive tree removal plan during this time of fiscal crisis. This is not a prudent use of taxpayer funds. [Gomez-1-04]

- (7) Per the SF Forest Alliance taxpayer funds will be diverted to pay for this destruction and blight. [Hess-1-07]
- I would also like to know where the \$\$ is going to come from. The Parks budget is already stretched and our parks are suffering as a result. So the city wants to divert more funds from that budget to rip out “non-native” flora? Honestly, this “non-native” flora has been here for over 100 years - I am really not sure it’s so “non-native” now and it is a great improvement over sand dunes. Does the NAP extend to ripping out everything in Golden Gate Park as well and turning that beautiful stretch of land back into its “native” state? That would be sand dunes again.

I will do everything I can to defeat this plan. [Johns-1-08]

- I also am quite concerned that limited city finances are being used for these type of obituary projects, and a financial analysis hasn’t been completed to understand the cost of the programs. [Lorenz-1-02]
- Thanks for listening. I am copying the mayor and the supervisor for this district on this message, so that they also will be aware of my concerns. Although the supervisor has been quoted in the SF Chronicle as dismissing the concerns of citizens such as me for being so much “rhetoric” and implying exaggeration, the fact is that approval of the EIR as it stands would privilege NAP to execute its misguided plan as it saw fit and on its own discretionary

time frame. That seems reason enough to me to sound an alarm. Of course, the huge cost of NAP's plans at a time when the budget should be managed most carefully also is a real shame. [Rehling-1-03]

- * The DEIR does not include any cost estimate for implementing the SNRAMP and does not explain how it will be funded. We object to spending scarce park funds on the Natural Areas Program when other essential services are being cut, Recreation Directors have been laid off, and fees are being charged for use of formerly free Park facilities. [Risk-1-06]
- The NAP program will produce an ongoing maintenance burden - since the pre-existing native species were displaced by the current non-natives, it seems logical that once planted native species will once again be displaced in a matter of time unless ongoing maintenance is applied. Maintenance = dollars last time I checked. Is this a good use of our limited funds? [Schlund-1-04]
- Bathrooms at playgrounds throughout the city are in pitiful condition. No human wants to go into these horrible pits, but RPD spends money on developing a NAP plan. NAP has been working on this plan for many years instead of providing the services that citizens want.

And how is it that NAP is exempt from the standards established by Proposition C that apply to all other parks?

One more thing needs mention. The idea of a city department taking so long to come up with a plan for what it is to do is completely absurd. NAP has been a major section of RPD since 1997. How much money should we spend developing a plan that provides so little return? And how long can we afford to keep the section of a city department functioning without a plan? [Shepard-A-1-03]

- NAP siphons funds from legitimate park purposes. NAP is exorbitantly expensive. At a time when SFRPD is not fulfilling its mandate to repair, maintain and improve existing park facilities, it is poor planning to incur even greater financial responsibility by undertaking the creation of Natural Areas within the parks. These areas are expensive to create and their maintenance is labor intensive and thus expensive to maintain. When children still are forced to play on fields so riddled with gopher holes that they risk serious injury, play in recreational centers that are severely in need of repair, and utilize bathrooms that are so unclean they present a health hazard, serious discussion of this NAP becomes ludicrous. [Valente-1-10]
- Finally, the cost of the proposed NAP Plan tree removals must be considered in relation to implementing this plan. San Francisco's park trees need serious attention and many older ones do need to be removed because they are dangerous. However, the Recreation and Park Department has almost no funding for this critical task. We cannot afford to maintain even the most hazardous trees in the most visited areas of popular parks; how can we possibly justify prioritizing the removal of perfectly healthy trees, all at huge financial and environmental cost to our City? [Wade-1-03]

Response G-4

These comments express concern regarding the funding sources and cost for implementation of the SNRAMP. Some comments suggest that implementing the SNRAMP would result in the reallocation of SFRPD resources, specifically maintenance resources, in order to fund the actions proposed in the SNRAMP. Comment GGAS-1-11 expresses concern that the SNRAMP does not commit the City to execute or fund the SNRAMP's proposed Monitoring Program.

CEQA does not require that an EIR include a detailed financial analysis of the proposed project. CEQA does require that an EIR include a detailed statement setting forth all the significant effects on the environment of a proposed project (California PRC Section 21100 (b)(1)). Additionally, CEQA defines the "environment" as the physical conditions that exist within the area that would be affected by a proposed project, including: land, air, water, minerals, flora, fauna, noise, and objects of historic or aesthetic significance (California PRC Section 21060.5). CEQA Guidelines Section 15064(e) discusses the treatment of social and economic impacts under CEQA. In short, the social and economic effects of a proposed project are only considered significant if there are associated physical effects on the environment.

As described on Draft EIR p. 89, the NAP staff is composed of biologists, ecologists, and natural resource managers that conduct routine maintenance within the Natural Areas on a daily basis. The NAP staff of approximately ten gardeners would continue to conduct the management actions within Natural Areas. The NAP also utilizes volunteer groups that range in size from 10 to 50 people per activity, but there are thousands of volunteer hours spent on an annual basis in the Natural Areas. Therefore, it is not anticipated that routine maintenance activities, which are substantially similar to current activities, would result in a need for SFRPD to hire additional staff. Also discussed on Draft EIR p. 89, larger projects, identified as programmatic projects in the Draft EIR, would be implemented by the SFRPD's Capital Division.

Some comments suggest that implementation of the SNRAMP would result in a reallocation of resources away from park maintenance standards that are imposed by Proposition C. The commenter is correct in that the Natural Areas are not subject to the maintenance standards imposed by Proposition C. However, while funding of programmatic projects identified in the SNRAMP would be required for implementation, it is speculative to assume that funding of the proposed SNRAMP would result in the reallocation of resources required for other park maintenance or improvements, which could in turn result in a significant adverse physical impact on the environment. As stated in CEQA Guidelines Section 15064(d)(3), "[a]n indirect physical change is to be considered only if that change is a reasonably foreseeable impact which may be caused by the project. A change which is speculative or unlikely to occur is not reasonably foreseeable." Comments about the relative economic merits of the proposed project will be considered by the decision makers as part of their decision to approve, modify, or disapprove the

proposed project. That consideration is carried out independent of the environmental review process.

With respect to concerns regarding the implementation of the SNRAMP's proposed Monitoring Plan, the Monitoring Plan has been proposed by SFRPD in their proposal for management of the Natural Areas and is included in the project description, as discussed on Draft EIR pp. 94 to 96. Given the nature of the proposed project and the goals identified in the SNRAMP, which specifically include those related to monitoring of the Natural Areas (refer to Draft EIR pp. 85 to 87), it would be speculative to assume that SFRPD would not carry out the project as proposed. As stated on SNRAMP p. 7-4, the monitoring "protocols have been designed and adapted to provide critical information using methods that are easily repeatable by SFRPD personnel and volunteers." SNRAMP Appendix I describes the monitoring protocol, which includes mapping, data collection, and data recording and analysis. Furthermore, decision makers would consider the financial implication of the proposed project and the environmental impacts of the project in its decision to approve or disapprove the SNRAMP.

It is noted that the Monitoring Plan proposed in the SNRAMP is different from a Mitigation and Monitoring Reporting Program (MMRP) required by CEQA. CEQA requires that an EIR identify feasible mitigation measures which could minimize significant adverse impacts of a proposed project (CEQA Guidelines Section 15126.4(a)(1)) and that a public agency adopt a program for monitoring or reporting on the measures it has imposed to mitigate or avoid significant environmental effects (CEQA Guidelines Section 15097). Should decision makers choose to carry out the proposed project, they would adopt a MMRP, committing the SFRPD to implement the mitigation measures identified in the EIR that were found to be feasible.

Comment G-5	Impacts of Natural Areas access restrictions on social fabric of San Francisco
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The response to Comment G-5 addresses all or part of the following individual comments:

Bartolotta-1-16
Litehiser-1-04

Bowman-2-11

Jake-1-06

- The NAP EIR does not adequately consider the impacts on the social fabric of San Francisco if one-quarter of its city parklands are closed to residents. Natural areas are not generally accessible to people, whether they have a dog or not. The NAP plan calls for the closure of many trails and reduction of recreational access. You cannot play catch with your child, have a picnic lunch, or play with a dog in a natural area. It can only be a plant museum. The EIR does not adequately consider the significant impact on families and the sense of shared community that access to parks fosters in our urban setting. [Bartolotta-1-16]
- 2. Evaluate the environmental impacts on public health related to discouraging daily exercise and recreation and on the changes to air quality for those exercising in the parks.

The DEIR does not specifically address the public health implications of policies that discourage exercise and diminish mental health benefits of the Natural Areas. In addition, trees benefit air quality and the plan does not address the impact of the removal of trees on air quality for those exercising or using the parks. The environmental impact on public health is significantly degraded by the SNRAMP proposed plan and the policies implemented by the Natural Areas Program since the creation of the SNRAMP [Bowman-2-11]

- More generally, the NARMP EIR does not adequately consider the impacts on the social fabric (environment) of San Francisco if one-quarter of its city parklands are closed to residents. Since the term “crime” is not found in the EIR, it evidently does not consider the effects of closing parks on changes in the park usage including more usage for criminal behavior such as drugs, camping out, and crimes against other citizens. [Jake-1-06]
- I also want to comment on what I consider an obsessive zeal of some Natural Areas promoters to restrict use of large parts of our parks for recreation ... as well as the removal of plants, habitat and trees to “restore” the park lands to some sort of “pristine wilderness” dating back hundreds of years. We need to look first at the needs of our citizens to enjoy the outdoors in their local parks and have as much access to them as possible. Plans that restrict “people” use of the parks is going in the wrong direction. I am also concerned about the use of pesticides use on attempts to eradicate invasive species in areas where people ad pets may be exposed.

I think my husband put it best, “a native plant is just an invasive species that got there first.” We have to be sensible about how we use our open space. Urban parks need to serve their populations first. [Litehiser-1-04]

Response G-5

These comments express concern that the SNRAMP would prohibit access to the Natural Areas, resulting in secondary social impacts on society including increased rate of crime and air quality and public health effects. Comments concerning the use of pesticides are directed to Response HZ-1, RTC p. 4-531, and comments concerning the air quality impacts of tree removal are directed to Response AQ-1, RTC p. 4-283.

The proposed project does not involve closing parks or reducing access to Natural Areas, but instead focuses on enhancing the remnant native communities within the Natural Areas. The impacts of trail closure on recreation and access is addressed under Impact RE-1 on Draft EIR p. 256. As discussed on Draft EIR p. 256, the SNRAMP calls for closing about 10.3 miles of social trails and creating about 1.1 miles of new trails. Social trails are defined as undesignated and redundant pathways that have developed through use of a Natural Area, and they are not maintained by the SFRPD. The SFRPD determined that social trails require closure because they are considered unsafe, to protect sensitive species or habitat, or to prevent erosion (Draft EIR p. 256). However, Natural Areas would remain open to the public and designated trail access would continue to be provided in all Natural Areas and, in some areas, existing trails would be improved and additional trails

would be created. On p. 256, the Draft EIR concludes that “[i]t is unlikely that closing social trails, redundant trails, or trails near sensitive species or habitat would deter a substantial number of people from using Natural Areas ... because general access would remain unimpeded and may improve through the creation of new trails and improving existing trails.” Furthermore, the recreation goals of the SNRAM, as identified on Draft EIR p. 86, include providing opportunities for passive recreation, such as hiking and nature observation and development of a recreation trail system that provides the greatest amount of accessibility while protecting natural resources. Given that trail access within all Natural Areas would continue to be provided, it would be speculative to conclude that removal of social or redundant trails could result in the secondary social impacts suggested by the commenters. Furthermore, CEQA Guidelines Section 15064(e) discusses the treatment of social and economic impacts under CEQA. Social and economic effects under CEQA are only considered significant if they result in a significant physical environmental effect. The commenters have provided no evidence that any potential social effect resulting from implementation of the SNRAM would have a significant physical impact on the environment.

One commenter reflected that “a native plant is just an invasive species that got there first.” Throughout time, humans have moved plants and animals around the globe, out of the environments they evolved in. Some species were introduced intentionally, and others were introduced unintentionally. A portion of those species—invasive species—are capable of spreading rapidly and displacing native species generally because they are adapted to similar climatic conditions, they lack predators or pests, and/or they have other characteristics that have allowed them to thrive. If left alone, Natural Areas would contain only a handful of native plants, and the animals that rely on a diversity of flora could become extinct.²⁷ In fact, the California Invasive Plant Council states that:

“When plants that evolved in one region of the globe are moved by humans to another region, a few of them flourish, crowding out native vegetation and the wildlife that feeds on it. Some invasives can even change ecosystem processes such as hydrology, fire regimes, and soil chemistry. These invasive plants have a competitive advantage because they are no longer controlled by their natural predators, and can quickly spread out of control. In California, approximately 3% of the plant species growing in the wild are considered invasive, but they inhabit a much greater proportion of the landscape.”²⁸

Comment G-6	Impacts on Natural Areas from poor maintenance
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The response to Comment G-6 addresses all or part of the following individual comments:

DogPACSF-1-20
Brown-1-17

GGHNA-1-05
Carrington-1-03

SFDOG-2-21

²⁷ <http://sfrecpark.org/parks-open-spaces/natural-areas-program/natural-areas-faqs/>, accessed on August 6, 2014.

²⁸ <http://www.cal-ipc.org/ip/definitions/index.php>, accessed on August 7, 2014.

- The NAP EIR does not adequately consider the negative impacts on aesthetics and land use of poor maintenance in natural areas. In most parks, the NAP plan allocates fewer than 20 days/year for planting/maintenance of the natural areas. In 16 of the 32 natural areas, the total maintenance planned is 10 or fewer days each year. There are countless stories of volunteers who have spent long hours planting native plants in NAP areas, only to see absolutely no maintenance performed once the plants are there. Without maintenance, the plants die, creating unsightly vistas of dead and dying plants. The NAP EIR should have considered the impacts of scaling back the program to a few areas that can be well maintained, as opposed to the current plans to take over one-quarter of San Francisco's city parkland. The NAP plan is more ambitious in the amount of work to be done annually than NAP has demonstrated it has the capacity to actually DO on a consistent basis. [DogPACSF-1-20] [Brown-1-17]
- The analysis does not adequately address impacts from poor maintenance of NAP areas.

The NAP program has a history of poor maintenance. One of the GGRNA Board members has testified at hearings that he and his daughter once spent a very enjoyable time planting native plants in a NAP-managed natural area. Six months later, when his daughter wanted to see how "her" plants were doing, they went to the park and discovered nothing but a bunch of dead and dying plants. There had been no maintenance done since the original planting. His daughter was devastated at the death of all the plants she had worked so hard to plant. The NAP Management Plan allocates fewer than 20 days/year for planting/maintenance of each natural area. In 16 of the 32 natural areas, the total maintenance planned is 10 or fewer days each year. A few parks are scheduled for only one work day/year. Clearly, NAP cannot maintain all the areas that it now controls. The NAP EIR must consider the impacts on aesthetics, and on the biological resources themselves of this lack of maintenance. What good does it do to plant native plants if they die within a few months because no maintenance was done? These impacts must be considered in the NAP EIR. [GGHNA-1-05]
- The NAP EIR does not adequately consider the negative impacts on aesthetics and land use of poor maintenance in natural areas. In most parks, the NAP plan allocates fewer than 20 days/year for planting/maintenance of the natural areas. In 16 of the 32 natural areas, the total maintenance planned is 10 or fewer days each year. There are countless stories of volunteers who have spent long hours planting native plants in NAP areas, only to see absolutely no maintenance performed once the plants are there. Without maintenance, the plants die, creating unsightly vistas of dead and dying plants. The NAP EIR should have considered the impacts of scaling back the program to a few areas that can be well maintained, as opposed to the current plans to take over one-quarter of San Francisco's city parkland (1/3 if you add in Sharp Park in Pacifica). The NAP plan is more ambitious in the amount of work to be done annually than NAP has demonstrated it has the capacity to actually DO on a consistent basis. This must be considered in the NAP EIR when considering aesthetics and maintenance. [SFDOG-2-21]
- Suggestions that this added burden can be addressed with added monitoring are ludicrous. As the dust and dirt swirl up just what is going to be done? Hose us all down? Rather than

propose closures and restrictions the City should step up and improve its maintenance of these areas. There seems to be a disregard for the condition of many dog parks, orphans of the City. Shame. [Carrington-1-03]

Response G-6

These comments express concern that the NAP currently does not provide sufficient maintenance of the Natural Areas including the DPAs within those Natural Areas. Comment Carrington-1-03 suggests that rather than closing DPAs, NAP should increase maintenance activities. Other comments suggest that NAP should scale back their program to a fraction of the existing Natural Areas.

In terms of maintenance, as described on Draft EIR p. 89, the NAP staff is composed of biologists, ecologists, and natural resource managers that conduct routine maintenance within the Natural Areas on a daily basis. The NAP staff of approximately 10 gardeners conducts management actions within the Natural Areas, and the NAP also uses volunteer groups that range in size from 10 to 50 people. The current levels of funding do not allow the SFRPD to employ additional maintenance staff; however, with the collaboration of SFRPD employees and volunteers, the Natural Areas are maintained to allow positive recreational experiences while enhancing natural habitats.

With respect to comments regarding closure of DPAs, the SNRAMP proposes the closure of only one DPA, located at Lake Merced. As described in Draft EIR Chapter III, Project Description, p. 136, this DPA is proposed for closure not because of poor maintenance, but rather to avoid disturbance to breeding birds. Although the SNRAMP proposes reducing the size of two other DPAs, no DPAs, other than the Lake Merced DPA, are proposed for closure at this time.

The SNRAMP does not propose to add new Natural Areas to its program, but rather outlines management activities within existing Natural Areas. The management actions of the SNRAMP are evaluated against the existing management actions as identified in the 1995 Management Plan and considering the existing physical conditions at the time of the Notice of Preparation of the EIR. Similar to the proposed project, the 1995 Management Plan outlines measures to maintain and enhance vegetation, wildlife, water quality, and control of erosion. The proposed SNRAMP, however, includes additional monitoring goals as well as design and aesthetic goals (Draft EIR pp. 86 to 87). The SNRAMP also includes a monitoring program to assess the success of restoration projects in achieving conservation and restoration goals, and proposes to employ an adaptive management approach in achieving those goals (Draft EIR pp. 90 and 94 to 96). It is reasonable to expect that with implementation of the identified monitoring plan, the survival and maintenance of newly planted vegetation would increase compared to existing conditions. Some successful restoration efforts include those implemented at Glen Canyon and Islais Creek, the oak woodlands at Golden Gate Park, Beacon Street at Billy Goat Hills, and Grandview Park, but there are others, as well.

The Draft EIR analyzes the environmental impacts of the proposed SNRAMP on aesthetic resources on Draft EIR pp. 189 to 199. With respect to scenic resources, the Draft EIR concludes that where nonnative vegetation is replaced with native vegetation that is more appropriate for the area's precipitation pattern, water availability, animal populations, and local ecosystems, new vegetation would be expected to thrive more successfully than invasive vegetation. The Draft EIR goes on to conclude that due to the relatively short maturation time, projects that involve the removal of trees and other vegetation with shrub, brush and grass cover would result in less-than-significant impacts to scenic resources. The Draft EIR also concludes that removal of nonnative trees and replacement with native trees would not be expected to result in a demonstrable adverse change to scenic resources (Draft EIR p. 195).

With respect to comments that suggest the scope of the SNRAMP should decrease in size, the purpose of this EIR is to evaluate the impacts of the project, as proposed by the project sponsor, as compared to baseline conditions. While an EIR can identify feasible mitigation measures that could minimize significant adverse impacts or identify alternatives that would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, the purpose of this EIR is not to recommend a different project. However, the impacts of a reduced project were evaluated in RTC Section 4.E, Alternatives, and specifically Response AL-13, p. 4-606. An alternative that would result in removal of Natural Areas from the NAP would not meet the mission of the NAP, which is to "preserve, restore and enhance the remnant Natural Areas and to promote environmental stewardship of these areas" (Draft EIR p. 77). Such an alternative would also not meet the following primary CEQA project objective:

- To identify, prioritize, and implement restoration and management actions designed to promote the functioning of San Francisco's native ecosystem, including the maintenance and enhancement of native biodiversity.

Any alternative that would substantially reduce the scope of the Natural Areas would not meet the basic CEQA project objective, and it is unclear, which if any, significant environmental effects such an alternative would reduce or eliminate.

Comment G-7 Prohibition on use of artificial turf

The response to Comment G-7 addresses all or part of the following individual comment:

Bartley-1-11

- Replacing natural play field areas with artificial turf is neither good for nature or humans. It has been clearly demonstrated that the long term impacts are overwhelmingly negative economically and environmentally. I don't at all understand why the city is still considering this. [Bartley-1-11]

Response G-7

This comment expresses the view that replacing natural play field areas with artificial turf is neither good for nature nor humans.

The SNRAMP does not propose the conversion of grass fields to artificial turf.

Comment G-8	Co-existence of sensitive species and golf
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The response to Comment G-8 addresses all or part of the following individual comments:

Archer-1-01

Mansbach-1-02

PH-Harris-01

PH-Links-02

- Many, many people LOVE Sharp Park Golf Course. We love golf, and we love that we are able to play this excellent public course. We don't think that there must be golf or animals, rather a partnership that makes everyone and every creature happy. It is possible to maintain and care for the wonderful Sharp Park Golf Course without doing away with the animals who also reside there. As I understand it, the animals did not come to live at Sharp Park until there was Sharp Park. [Archer-1-01]
- I am aware that the continued existence of Sharp Park as a golf course faces opposition. I really don't understand why as the golf course and the wildlife can and do coexist. Certainly my planning background influences my thinking that competing land uses for a specific property can be amicably accommodated. [Mansbach-1-02]
- Generally the notion of sharing the property between species and golfers, uhm, we support that. [PH-Harris-01]
- And the habitat restoration that's in the works in the subject of this EIR is by no means incompatible with maintaining that golf course. [PH-Links-02]

Response G-8

These comments express the view that habitat, wildlife and golf can co-exist and are not incompatible. The comments do not relate to the adequacy or accuracy of the analysis contained in the Draft EIR. Comments concerning Sharp Park are also directed to Response PD-13, RTC p. 4-175.

4.A.2 CEQA Process

Comment G-9	Need for a recirculated or subsequent project-specific Draft EIR
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The response to Comment G-9 addresses all or part of the following individual comments:

Baye-1-07

McAllister-1-02

- **4. Summary of CEQA deficiencies and recommendations for remedies.**

The City should either recirculate the DEIR to address these issues, or it should prepare a subsequent project-specific DEIR for Sharp Park. I recommend as the most expedient and

efficient CEQA process the separation of the stand-alone Sharp Park project DEIR from an otherwise consistent programmatic DEIR. [Baye-1-07]

- I respectfully request that the document be corrected and recirculated with the correction of the error prominently displayed to readers. When the document has been corrected and recirculated, a new comment period should be announced of equal length to that first announced. [McAllister-1-02]

Response G-9

These comments request that either the Draft EIR should be recirculated or a subsequent project-specific Draft EIR should be prepared for Sharp Park to address the issues they raised in their comment letter, which include issues related to the conversion of wetlands to uplands for golf course purposes, mitigation for wetlands impacts, an alternative to dredging, impacts associated with dewatering, sediment testing data, impacts associated with acid soil sulfate conditions, and cumulative impacts associated with dredging, salinity stratification, seawater intrusion, and sea level rise. This commenter also requests that a Sharp Park Draft EIR be provided separately from the rest of the programmatic SNRAMP analysis. The error mentioned in the second comment (McAllister-1-02) relates to the fact that Draft EIR p. 2 incorrectly identified the environmentally superior alternative, although it was correctly identified beginning on Draft EIR p. 525.

The second comment appears to request recirculation due to an error in the summary chapter that identified the maximum restoration alternative as the environmentally superior alternative, which is contrary to the discussion in the Alternatives chapter, which states that the maintenance alternative is the environmental superior alternative. This error is being corrected as a text change, which is provide in Response AL-4, RTC p. 4-566, and Response G-10, RTC p. 4-50.

With respect to recirculation, CEQA Guidelines Section 15088.5 states that recirculation of an EIR prior to certification is only required when significant new information is added to the EIR after public notice is given of the availability of the Draft EIR for public review. New information added to an EIR is not significant unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect. Significant new information can include (1) a new significant environmental impact; (2) a substantial increase in the severity of an environmental impact; (3) a feasible project alternative or mitigation measure, considerably different from others previously analyzed that would clearly lessen the significant environmental impacts of the project, but the project proponents decline to adopt it; or (4) the Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

Based on the comments received and the responses provided in this RTC document, there are no new significant impacts, substantial increases in the severity of an environmental impact, or identification of new alternatives or mitigation measures that are considerably different from those

previously analyzed (including those considered and fully evaluated in the EIR, rejected as infeasible pursuant to CEQA, or rejected from further analysis due to engineering, design, technological, or cost considerations). Further, as demonstrated in this RTC document, none of the comments received provide substantial evidence that the Draft EIR was fundamentally and basically inadequate, nor was meaningful public review and comment precluded. In fact, two separate comment periods were provided. Public agencies, organizations, and individuals were invited to provide written comments (letters, emails, and facsimiles) on the Draft EIR during the first public review comment period, which opened on August 31, 2011, and ended on October 31, 2011. In addition, the Planning Commission held a public hearing on the Draft EIR on October 6, 2011, and Commissioners, organizations, and individuals made oral comments at that hearing. A second public review comment period, for written comments, was provided from April 27, 2012, to June 11, 2012. A Public Notice of the additional comment period was sent to over 300 neighborhood organizations and individuals through direct mailing and was also posted in the following locations: SFRPD's McLaren Lodge, the Planning Department, and the San Francisco County Clerk's office. In total, the two public comment periods were open for 107 days, exceeding the 45-day public review period required by CEQA.

With respect to subsequent project-specific review for the Sharp Park restoration project, and consistent with CEQA Guidelines Section 15162, a Subsequent EIR can only be prepared after an EIR has been certified and only when one or more of the following conditions occur: (1) substantial changes are proposed in the project that require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; (2) substantial changes occur with respect to the circumstances under which the project is undertaken that would require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or (3) new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted. None of these three circumstances has occurred with respect to the SNRAM Draft EIR; therefore, a Subsequent EIR is not required.

Also, with respect to whether the restoration activities at Sharp Park should be evaluated in a stand-alone EIR, refer to Response PD-12, RTC p. 4-168.

Lastly, issues raised by the first commenter, beyond the request to recirculate the document or prepare a subsequent project-specific DEIR for Sharp Park, are provided in Response BI-25, RTC p. 4-424, Response BI-7, RTC p. 4-365, Response HY-5, RTC p. 4-501, and Response AL-11, RTC p. 4-600.

Comment G-10	Public outreach and Draft EIR public review process
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The response to Comment G-10 addresses all or part of the following individual comments:

OPR-1-01	GGAS-1-04	NTC-2-01
SCBC-1-01	SFDOG-2-01	SFDOG-2-02
SFFA-1-01	SFFA-2-01	SFFA-3-24
WEI-2-01	WTPCC-1-10	WTPCC-1-11
Bowman-2-16	Gomez-1-03	Johns-1-02
McAllister-3-10	McAllister-3-11	Miller-E-2-01
Miller-N-2-01	Rehling-1-02	Risk-1-01
Shepard-A-1-04	Vittori-1-01	

- The review period closed on October 17, 2011, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. [OPR-1-01]

- One of the clear failures of the Recreation and Parks Department and the Natural Areas Program to date has been the inability to effectively communicate that native wildlife, plants and their ecosystems are valuable and extremely vulnerable assets to the quality of life in San Francisco. In communications stating opposition to the Natural Areas Program, some have argued that because San Francisco is a city, it is inherently “unnatural” and that native ecosystems do not deserve protection. Others seek to push more domestic pets, including off-leash dogs and feral cats, into these few, remnant areas. Golden Gate Audubon believes that the Project must include an outreach element to dispel false information about the NAP, promote the importance of stewardship of natural areas, and help build a political constituency to keep the NAP adequately funded and empowered to meet the other objectives. [GGAS-1-04]
- Thus, the CUMULATIVE effect on the stakeholder public is to be overwhelmed by the necessity to participate in all of these processes, thereby potentially diluting effective public participation. Unfortunately, the public is not well-represented in any of these situations because funding for public-serving non-profits is in the toilet.

Thus, your determination is detrimental to the optimization of a robust public process for the Significant Natural Resource Areas Management Plan, the single most important conservation document in the City’s history. [NTC-2-01]

- We have reviewed the Significant Natural Resource Areas Management Plan DEIR, a large and complex document covering 32 natural areas, including areas with ancillary complicating issues, such as Sharp Park. All of the signatories to this letter have long and extensive involvement with these lands and expert knowledge and familiarity with their management problems. We find discrepancies, even contradictions, in the DEIR. We

appreciate the great amount of work that went into preparing this document, particularly when its preparation coincided with that of other documents such as the America's Cup DEIR. We, too, are heavily involved in commenting on these issues, as well as on the proposed revision of the Recreation & Open Space Element of the General Plan, and we find that their adequate address is beyond our capabilities in the time allowed. We therefore request that we be given an additional two months to process the large volume of information and form thoughtful and useful comments. [SCBC-1-01]

- SFDOG is very concerned about poor outreach by the Planning Department and the Recreation and Park Department to the public about the NAP EIR. There was no mention of the NAP EIR on either the SF Recreation and Park Department website, nor on the Natural Areas Program website. Neither site had a link to the Planning Dept. website where the NAP EIR was located. We heard frequently from people who tried to find the NAP EIR to read it, couldn't find it on the Rec and Park website, and had no idea where else to look for it. In addition, there was no official notice posted in parks most affected by the NAP, for example, on Bernal Hill (where part of the DPA will be closed by NAP). [SFDOG-2-01]
- In addition, the Planning Commission's hearing on the NAP EIR on October 6 was another case of poor outreach. The Planning Department's website (where the EIR was posted) listed the hearing as beginning at 1:30 p.m. This start time was posted even on October 6th itself. The only way to find out that the hearing time had been changed was to look at the meeting agenda. While the original agenda that was posted had the 1:30 pm starting time, at some point the agenda was changed to reflect the noon starting time. I happened to check the agenda on Monday, October 4 and noticed the change. But many people did not. I was at the Commission meeting and the NAP EIR item was over largely by 1:30 pm, the original starting time. Many people showed up for the Planning Commission meeting just after 1:30 pm, intending to speak about the NAP EIR but, because the agenda item was already over, they were denied the chance to give oral public comment. It is important for decision makers and Commission members to *hear* public comment, not just read it, to hear the passion in people's voices as they speak. By changing the starting time of its October 6th meeting and not letting people know, the Commission essentially denied people the chance to give oral public comment on the NAP EIR. When the problems with the hearing time are combined with the poor outreach described above, it is clear that the Planning Department cannot continue with the FIR process. Planning should re-start the public comment process with better outreach to ensure the comment process is fair and accurately reflects the public's opinions. [SFDOG-2-02]
- Attached is a letter from the San Francisco Forest Alliance requesting that you amend your notice for the Draft DER for the SNRAMP. We have asked for a formal response by no later than Friday, given the short comment period just established. We would be happy to discuss our proposal for resolving our concerns about the previous notice by telephone this week if that would be helpful to you. We look forward to hearing from you.

1. Notice - What The Law Requires¹

(a) CEQA

CEQA requires public involvement to ensure that environmental impacts are considered in governmental-decisionmaking *before* action is taken. Public agencies are required to have in place procedures that will ensure wide public involvement, both formal and informal, in order to receive and evaluate public reactions to environmental issues related to the agency's activities.² Notice must be given in sufficient time so that the public has notice of the full review period.³

CEQA's statutory and regulatory provisions set for the *minimum* notice requirements for government projects that may have an impact on the environment. CEQA provides that notice of a DEIR comment period can be accomplished through: (1) publication in the newspaper of largest circulation in the areas affected; (2) posting of notice on and off the site in the area where the project is to be located; (3) direct mailing to owners and occupants of parcels contiguous to the project parcel. In some cases, one form of notice may be sufficient, but in others, all three forms of notice may be required. In addition, other laws also impose additional notice requirements. In light of this and CEQA's goals of meaningful public participation, CEQA also provides that "the lead agency may also employ any other means of notification it desires to use."⁴

(b) Due Process

In instances where a project substantially affects constitutionally protected interests, due process requirements also must be met. In such cases, due process require that notice be "reasonably calculated to afford affected persons the realistic opportunity to protect their interests."⁵ Such notice must "occur sufficiently prior to a final decision to permit a 'meaningful' predeprivation hearing to affected landowners."⁶

(c) San Francisco Forestry Ordinance

San Francisco's Urban Forestry Ordinance provides that before the City removes a tree, it must give 30 days' prior written notice to all interested San Francisco organizations and all owners and occupants of properties that abut, or are on or across from the block face where the affected tree is located. If any person appeals the notice, the City must hold a hearing to consider public testimony on the tree removal. Written notice of the date, time and place of the hearing must be posted on the affected tree, provided in a newspaper of general circulation, and sent to the objecting party, the owner of the property abutting the tree, and all interested organizations.⁷

(d) San Francisco Planning Code

The San Francisco Planning Code requires that neighboring property owners be notified of projects that involve property demolition and alteration. Neighborhood notification is mailed to neighbors within 150 feet of the subject property and relevant neighborhood groups for a 30-day public review period.⁸

2. *Why The Notice Procedures Followed For The DEIR Are Inadequate*

We are aware that notice of the completion of the DEIR was published in October 2011 and more recently noticed again in late April, but we believe such notice is, in light of the facts of the proposed project, legally deficient.

The DEIR contemplates *major* changes to parks that are used daily by thousands of San Francisco residents, and yet, according to our own research, very few park users know that the City has systematic and wide-scale plans to actively and permanently alter the landscape, recreational features, public uses and flora and fauna of the parks they visit every day. In addition, adjacent and other nearby property occupants and owners have not been notified of completion of the DEIR, despite the fact that the project will have a significant impact on them and their property interests.

Thirty-one parks, including a total of over 2,700 acres, and representing (with the exception of Golden Gate Park and areas managed by the federal government) substantially *all* of the recreational space of San Francisco's more than 800,000 residents are, according to the DEIR, slated to undergo radical change in pursuit of the misguided utopian goal of returning these areas to their natural pre-colonial state.

The impacts of the proposed project are significant and too varied to list here, but include cutting down over 18,000 trees, closing or relocating over 54,000 feet of trails, increasing use of pesticides to kill "invasive" species and protect "native" plants, and diversion of City funds from other recreational programs (e.g., kids' educational activities) and improvements, such as renovation of neighborhood restrooms, playgrounds, and clubhouses. Such actions will impact not only park users, but also resident bird, animal and plant species.

The potential impact of the proposed project on neighboring property owners is nothing short of devastating. Owners who purchased homes in view of city parks stand to have their homes devalued by deforestation. Other owners, for example those abutting the west side of Mount Davidson, are likely to face significant drainage and erosion problems as a result of alterations to the landscape. For other owners, property values (and enjoyment of life in the City) may be decreased by the loss of neighborhood trails, trees, play areas and dog-accessible areas.

The City has done virtually nothing to inform residents near affected areas about the proposed project. By comparison, when UCSF developed plans to remove trees in Mount Sutro Forest, it notified affected neighborhoods with flyers detailing the proposed nature and timing of the work, and held a neighborhood meeting at which they took comment from interested parties.

While we appreciate that the City has made efforts to notify neighborhood groups of the proposed project, we do not believe that such groups adequately represent the interests of those who live and recreate in San Francisco. In this regard, it is important to remember that the resources that are to be altered as part of the project are in fact legally *owned* by San Francisco residents. The City is a mere *trustee* for these resources, on their behalf.

3. Correcting The Deficient DEIR Notice

We recommend and request that the following steps be taken to correct the deficient DEIR Notice:

1. Revise the notice mailed out on April 27th to include Table 5 (Summary of Natural Areas Management Plan) from page 114 of the DEIR,⁹ a copy of which is enclosed with this letter.
2. Hold at least one public hearing on a date approximately halfway through the comment period, and include time and place for the hearing in the revised notice.
3. Mail the revised notice to property owners and occupants within 150 feet of parks impacted by DEIR, and all others who, prior to issuance of the new notice, express, or have in the past expressed, an interest in the DEIR.
4. Post notice at all affected park trail and road entrances and exits, and in other highly visible locations such as at playgrounds, and near restrooms and dog run areas.
5. Extend the comment period to 60 days after the notice will have been accomplished pursuant to 3 and 4 above.

We would like to discuss these requests with you at your earliest convenience, especially in light of the fact that under the April 27th notice, the period for comments is set to expire on June 11th. We would like a written commitment from the City by May 18th that it will comply with the steps outlined above.

We would be happy to meet with you to discuss these steps further or discuss them by telephone or email. [SFFA-1-01]

- Thank you again for your prompt response, which our group has now reviewed. We appreciate your sending information about the steps the City has undertaken to attempt compliance with CEQA's notice-and-comment procedures; however, we continue to believe that the City's actions to date have been inadequate.

In that regard, we would appreciate receiving a further response to our letter addressing the deficiencies we identified under California law other than CEQA, including due process requirements under state and federal law, as well as the San Francisco Forestry Ordinance and the Planning Department's neighborhood notification requirements. Specifically, we would like to understand the City's position that posting in and near the affected parks (rather than at McLaren Lodge, where most park users may not visit) and mailing notice to adjacent and other nearby property owners is not required for this project.

Since these issues were part of our original letter, and especially in light of the fact that the current DEIR notice period expires soon, we respectfully request that you respond today.

We greatly appreciate your responsiveness in this regard. [SFFA-2-01]

- The public review and comment process was further compromised by the last minute decision to hold the public hearing by the Planning Commission earlier than originally announced. The public hearing was originally announced to begin at 1:30pm on October 6th. Shortly before the hearing, the starting time was moved up to noon.

The public was further confused about the timing of their opportunity to speak to the Commission about the DEIR by the placement of the item on the agenda. The DEIR for the SNRAMP was item number 13 on an agenda with 19 items. The public had no way of knowing when the 13th item would be heard. Many naturally assumed that it would not be at the beginning of the hearing. They were wrong.

The public comment period on the DEIR for the SNRAMP was completed by 2 pm. Many people came to the hearing, hoping to speak, only to find that they had missed the opportunity to do so.

A few people arrived in time to speak, but didn't arrive in time to hear the staff of the Planning Department acknowledge the mistake about the "Environmentally Superior Alternative." Therefore, they wasted their public comment by focusing on an error that the Planning Department had made a commitment to correct. No one showed them the courtesy of telling them during the hearing that the error would be corrected.

There are many neighbors of the so-called "natural areas" who have been following this issue for 15 years. They were deeply committed to speaking and they were deprived of the opportunity to do so by the change in the time of the hearing.

3. The public was not adequately informed of the extension of the deadline for comment

The President of the Planning Commission requested at the public hearing on October 6th that the deadline for written public comments be extended to October 31st. No effort was made to inform the public of this extension of the deadline. The Planning Department was asked (in writing) to inform any member of the public that had been informed of the original deadline of October 17th of this extension. That request was refused.

Such refusal to provide the public with notification of the extension of the deadline will further compromise the public review process.

4. The public was not adequately informed of the re-opening of the public comment period

The San Francisco Forest Alliance learned (from a neighborhood association) that the public comment on the DEIR was reopened on April 27, 2012, about one week after the notice was mailed. SFFA immediately requested that this public notice be distributed more widely to the neighbors of the natural areas and posted in the natural areas. This request was refused.

According to the mailing list that was used to distribute the notice of the reopening of the public comment period, the same neighborhood associations that were notified of the first public comment period were notified again. The second public comment period was not more widely distributed than the first. The organizations that had an opportunity to comment in October 2011 were essentially given a second opportunity to comment. This is preferential treatment that will further jeopardize the fairness of the public process.

The reopening of the public comment period was another opportunity for the DEIR to be corrected. The incorrect statement on page 2 of the DEIR stating that the Maximum Restoration Alternative is the Environmentally Superior Alternative was not corrected when the public comment period was reopened. That incorrect statement was simply redistributed

and reposted to the Planning Department website. Once again, the refusal to correct this statement will prejudice the public comment.

Conclusion

- **Announce another public hearing along with the corrected DEIR**
- **Announce another deadline for written public comments that is at least as long as the original period**
- **Distribute the public notice regarding the new public comment period to the neighbors of the natural areas and post the public notice in the natural areas.**

The public review and comment period for the DEIR for the SNRAMP has been a stunning display of unfair dealing with the taxpayers who are paying for this project. It is experiences such as this that turn taxpayers into protesters. [SFFA-3-24]

- The Wild Equity Institute and the undersigned San Francisco-based organizations (collectively "Conservation Organizations") request that the San Francisco Planning Department reopen the public comment period for the Draft Environmental Impact Report (DEIR) of the Significant Natural Resource Areas Management Plan (SNRAMP), Case Number 2005.0912E.

Yet we recently discovered that the City re-opened the public comment period for the SNRAMP DEIR on or about April 30, 2012, and through June 11, 2012. *Astonishingly, none of the Conservation Organizations were notified of San Francisco's decision to reopen the public comment period.*

"Public participation is an essential part of the CEQA process" Cal. Code Regs. tit. 14, § 15201. The City of San Francisco has recognized this, stating that Public participation, both formal and informal, shall be encouraged at all stages of review, and written comments shall be accepted at any time up to the conclusion of the public comment period. The undersigned believe public notice of the reopened comment period was insufficient to properly inform all stakeholders. Perhaps the City's intent was to only give specific interest groups notice that had not commented during the previous comment period, and therefore the Conservation Organizations were not notified. But any opening of a CEQA comment period should be broadly publicized, and at bare minimum, should be publicized to those organizations and individuals who previously commented and requested notice pursuant to § 21092(b)(3) of the California Public Resources Code.

Therefore we respectfully request the Planning Department reopen the comment period for the Draft EIR for another 4-6 weeks. Please inform us of the dates during which the comment period will be reopened as soon as possible.

§ 21092(b)(3) of the California Public Resources Code requires that "notice [of the public comment period] ... shall be given to the last known name and address of all organizations and individuals who have previously requested notice." We reiterate our request that the Planning Department provide the Conservation Organizations with notice of all future CEQA proceedings involving Sharp Park and/ or Sharp Park Golf Course, and all future

CEQA proceedings involving the SNRAMP, the City's Natural Areas, and/or the Natural Areas Program. The requested notices should be mailed to the following address: [WEI-2-01]

- WTPCC opposes NAP in part because of the poor job NAP has done to inform park neighbors and neighborhood associations about its plans. Neighbors who live immediately adjacent to Mt. Davidson, for example, have said they were never given any official notice of NAP's plans for the park, especially its plans to cut down 1,600 trees. Established neighborhood associations, including many WTPCC members, have not been contacted by NAP. Many have said they never heard anything about the DEIR. Indeed, the Planning Department offered a tacit acknowledgement of this lack of public outreach when it re-opened public comment on the Draft DEIR last month. [WTPCC-1-10]
- NAP did not contact park neighbors and users or neighborhood associations to find out what they wanted in the natural areas in their neighborhood parks when NAP staff were developing their plans. During the plan development process, citywide NAP advocacy groups were contacted for input on what NAP should do in the parks, yet the people who live adjacent to or who regularly use the parks (that is, those who will be most impacted by any NAP restrictions) were ignored. The only input most people had was whatever they could say during a one-minute public comment at a Recreation and Park Commission meeting after the plans were already developed. The parks belong to the people of San Francisco, not to NAP staff. All park neighbors and users (not just those known to support NAP) must be involved in discussions about what to do in natural areas. Without this level of public outreach and engagement, NAP's plans lose support and credibility.

Even when people have explained their concerns to NAP staff, it seems to fall on deaf ears. At a 2002 meeting of the Golden Gate Heights Neighborhood Association (GGHNA), members complained about NAP's removal of iceplant at the neighborhood's Grandview Park. Grandview is the only remaining sand dune in San Francisco (other than at the beaches), but it is completely surrounded by homes, some of which have backyards that abut the park. Over the years, neighbors and park staff had planted iceplant at Grandview because it was the only plant that seemed able to hold the sand in place. When NAP took control of the park, it began to remove the iceplant because it was non-native. At the GGHNA meeting, several park neighbors complained that the iceplant removal had caused sand to drift into and cover their backyards, damaging their property. Lisa Wayne, the head of NAP who had been invited to respond to the neighbors' concerns, responded that NAP had no responsibility for property damage outside park boundaries caused by its removal of erosion-controlling plants. When the SNRAMP was released several years later, it called for "scattered, open sand" at Grandview Park. Over the years, GGHNA has repeatedly submitted public comments asking NAP to remove the goal of "scattered, open sand" at Grandview, yet it remains in NAP's plans. [WTPCC-1-11]

- RPD has also made almost no effort to proactively inform the general public of this significant project that changes the land use of highly valued parks from neighborhood parks to "sensitive habitat." This change of the land use to conservation will significantly change the visitors' experience. As identified by SFFA, few residents are aware of the

proposed plan even though the plan with impact the more than 60% of people that say they use trails in SF parks. [Bowman-2-16]

■ **2. Lack of communication by NAP**

We read the Miraloma Park monthly newsletter, the Westside Observer local paper, along with the SF Chronicle, etc. But only recently did we become aware of the NAP plan for drastic tree removal in our backyard. They have not communicated their plans to our neighborhood. As homeowners whose property is adjacent to Mt. Davidson Park, we should have received personal notification of such drastic measures. If a home or business in our area plans major changes, they are required to notify residents within specific parameters. Why doesn't NAP have to notify us of their intentions to destroy our backyard? [Gomez-1-03]

- The only notice I received of this plan was from my local community association. And that was only 4 weeks ago. Where was the public notice of this plan published? [Johns-1-02]
- The public hearing for the DEIR limited public comment. The public review and comment process was further compromised by the last minute decision to hold the public hearing by the Planning Commission earlier than originally announced. The public hearing was originally announced to begin at 1:30 pm on October 6th. Shortly before the hearing, the starting time was moved up to noon.

The public was further confused about the timing of their opportunity to speak to the Commission about the DEIR by the placement of the item on the agenda. The DEIR for the SNRAMP was item number 13 on an agenda with 19 items. The public had no way of knowing when the 13th item would be heard. Many naturally assumed that it would not be at the beginning of the hearing. They were wrong.

The public comment period on the DEIR for the SNRAMP was completed by 2 pm. Many people came to the hearing, hoping to speak, only to find that they had missed the opportunity to do so.

A few people arrived in time to speak, but didn't arrive in time to hear the staff of the Planning Department acknowledge the mistake about the "Environmentally Superior Alternative." Therefore, they wasted their public comment by focusing on an error that the Planning Department had made a commitment to correct. No one showed them the courtesy of telling them during the hearing that the error would be corrected.

There are many neighbors of the so-called "natural areas" who have been following this issue for 15 years. They were deeply committed to speaking and they were deprived of the opportunity to do so by the change in the time of the hearing.

Conclusion

The public review and comment process was severely compromised by a serious mistake and by several actions of the Planning Department staff. The appropriate legal remedies for these mistakes are:

- Correct the DEIR by accurately identifying the "Environmentally Superior Alternative"

- Distribute the corrected DEIR in the same manner as the original was distributed
- Announce another public hearing along with the corrected DEIR
- Announce another deadline for written public comments that is at least as long as the original period

The public review and comment period for the DEIR for the SNRAMP has been a stunning display of unfair dealing with the taxpayers who are paying for this project. It is experiences such as this that turn taxpayers into protesters. [McAllister-3-10]

- The public was not adequately informed of the extension of the deadline for comment

The President of the Planning Commission requested at the public hearing on October 6th that the deadline for written public comments be extended to October 31st. No effort was made to inform the public of this extension of the deadline. I asked (in writing) the Planning Department to inform any member of the public that had been informed of the original deadline of October 17th of this extension. That request was refused.

I have been following the destructive native plant restorations in the San Francisco Bay Area for 15 years. I have therefore received several EIRs and EISs for public comment. When there were extensions of the comment deadline, I received written notification of that extension. Based on that experience, I believe it is standard practice to notify members of the public who have expressed an interest in an EIR/EIS of an extension of deadlines.

Such refusal to provide the public with notification of the extension of the deadline will further compromise the public review process.

Conclusion

The public review and comment process was severely compromised by a serious mistake and by several actions of the Planning Department staff. The appropriate legal remedies for these mistakes are:

- Correct the DEIR by accurately identifying the “Environmentally Superior Alternative”
- Distribute the corrected DEIR in the same manner as the original was distributed
- Announce another public hearing along with the corrected DEIR
- Announce another deadline for written public comments that is at least as long as the original period

The public review and comment period for the DEIR for the SNRAMP has been a stunning display of unfair dealing with the taxpayers who are paying for this project. It is experiences such as this that turn taxpayers into protesters. [McAllister-3-11]

- Given that we have limited time before the current comment period expires, we would like to focus the City’s attention on the big picture. The bottom line is that the City has failed to - address our due process concerns. Our review of City requirements was meant to be illustrative, not exhaustive, and to emphasize that where significant private property interests are at stake (e.g., where construction or tree removal is planned on neighboring properties), notice to affected residents is required. This notice is required not only by local law, but also as a matter of constitutional law. In our initial letter, we offered examples of

concrete ways in which San Francisco property owners will be impacted by the City's proposed project. There may be other impacts not detailed in our letter. For multiple legal reasons, we believe the City is obligated, in light of the magnitude of the project and the severity of the impacts, to notify city residents (especially affected property owners and park users) about the project with sufficient time to allow them to be involved in decision making.

We understand from your recent responses that you are unwilling to: (1) modify the April 27th notice to more clearly set forth the impacts of the proposed project; (2) notify property owners within 150 feet of affected parks; (2) post notice in and near the affected parks; (4) hold a public hearing on the project; or (5) or extend the notice period beyond June 11th.

We believe your response is deficient and we are considering our political and legal options in this regard. In the meantime, we would like to request that the City provide us with a list of property addresses located within 150 feet of affected parks, so that we can attempt to contact such property owners ourselves prior to expiration of the current notice period. We also would like to request that the City allow members of the SFFA to post the City's notice of the project in and near affected parks. [Miller-E-2-01]

- In meetings with several individuals and one group of friends, I learned that none of them had heard of NAP's plans either by direct contact or by public means; i.e. Newspapers or television.

It seems too important and far-reaching a plan to be carried out without general public input. I hope we will be able to be well-informed before action is taken and irreversible harm is done to our environment. [Miller-N-2-01]

- One other thing: I live in Miraloma Park, just opposite the Stanford Reservoir which is just below Mt. Davidson Park. I should have been notified about NAP's plans and, specifically, about the methods that NAP would take to impose its extremist vision on my neighborhood and others in the city. Therefore, I also want to bring your attention to that failure to properly inform the public, especially those living in areas most affected by NAP's plans. [Rehling-1-02]

- So it came as quite a shock to us to learn that the San Francisco Recreation and Parks Department plans to remove large numbers of trees from the forested side of the mountain.

We were first informed of those plans in February 2012 on a walk led by local historian Jacquie Proctor. It was most disconcerting for us to be told that the NAP plan has been under consideration since 1997, was finalized in 2006, and that the plan's DEIR is currently under review. Even though we were the ones who would be most affected by those plans, the Recreation and Parks Department has never organized any community informational meetings in our neighborhood or posted any signs on the main forest trail entrances to notify us of those plans. [Risk-1-01]

- NAP has forged ahead with developing this plan and with few exceptions, excluded citizen involvement. None of the neighborhood organizations west of twin peaks have ever been asked to host a presentation by NAP of their plans, even though Mt Davidson is in our backyard. On the other hand, we were asked to host presentations of RPD bonds in 2008 and

currently for the 2012 bond. So each time RPD needs money, they come to us asking for help. They do not involve us in planning for how to spend the money. Please reject the NAP plan and DEIR and demand that RPD be accountable to the citizens of our city and provide needed services.

NAP did finally make a presentation on at the West of Twin Peaks Central Council in May, 2012 of the NAP plan, but only after repeated calls to RPD. After reading the plan and listening to the NAP presentation I voted to oppose the plan and ask for you to do the same. [Shepard-A-1-04]

- I did restoration as a professional and a volunteer for 20 years. I ran a crew with the California Conservation Corps and the National Park Service doing habitat restoration all over the Bay Area. I worked on Bernal Hill, McLaren Park, Glen Canyon, and Sharp Park as a volunteer and community member. Unfortunately, what I have seen has saddened me; I think we've betrayed the principles of integration and inclusion that we started out with. Over time the restoration movement has become exclusionary, pushing the community out of the parks.

This process is a perfect example of community exclusion. I go to Bernal Heights, Glen Park, Stern Grove, Pine Lake, and McLaren Park with my dogs several times a week. There are no official notices anywhere inviting public review. When advocacy groups place notices on the bulletin boards, they've been torn down.

Please pay attention to the numerous efforts we have made over the years to make the Natural Areas Program more integrated with city life. I've attached a summary written by Sally Stephens of SFDog. She states, better than I could, the numerous attempts by the public to make this process fair and inclusive. I attended many of these meetings, and I have come out with a much more jaded view of the democratic process.

The saddest part is that we could do habitat restoration right. We could easily integrate restoration with existing park uses. [Vittori-1-01]

Response G-10

Some comments request extension of the public comment period, suggest that the Draft EIR be recirculated with revisions, express concerns regarding the posted timing of the public hearing on the Draft EIR, and express dissatisfaction with notification for the extension of the public comment period.

These comments acknowledge the public review period for the Draft EIR, state dissatisfaction with the public outreach process, or express concern that the Planning Department did not adequately notice the availability of the Draft EIR in accordance with CEQA requirements and noticing requirements identified in the San Francisco Forestry Ordinance and Public Works Code.

The commenters question the adequacy of the public outreach and communication process for the SNRAMP.

Public Outreach and Notification Process

The development of the SNRAMP has occurred over 10 years, beginning in 1995, and consisted of numerous and extensive meetings with involvement of over 3,000 individuals. In June 2005, when the Draft SNRAMP was released for public review, three well-attended public workshops were held throughout the city. Outreach also included sending fliers to neighborhood groups and residents within 300 feet of all Natural Areas, the Mayor's Office of Neighborhood Groups, SFRPD's list of neighborhood groups, and other interested parties. Announcements were also posted at all Natural Area sites. An online survey was available for individuals and members of the public who were unable to attend in person. Feedback was received from approximately 2,700 members of the public and recommendations were received from three independent scientists. Further, several task forces, committees, and/or working groups were convened as part of this process, including the Natural Areas Program Citizen Advisory Committee, an ad hoc group that made recommendations on how to revise the plan, a Science Round Table group that reviewed the Alternatives Report for Sharp Park, and the Sharp Park Working Group. In addition, revisions to the Sharp Park Restoration Plan were also made in response to input from scientists and regulatory agencies, which resulted in additional restoration areas and, as a result, additional impacts to the golf course. A detailed timeline of SFRPD's outreach and planning process is provided on the SFRPD's website at <http://sfrecpark.org/parks-open-spaces/natural-areas-program/significant-natural-resource-areas-management-plan/>.

The Planning Department's public outreach and notification process for the Draft EIR was conducted in accordance with CEQA and the CEQA Guidelines. The noticing requirements identified by commenters in the Planning Code apply to projects that are subject to various Planning Department approvals, including a conditional use or variance granted either administratively or by the Planning Commission, and are, therefore, not applicable to public review of the Draft EIR for the proposed SNRAMP. With respect to other noticing requirements, Draft EIR p. 157 acknowledges that tree removal activities must comply with the Urban Forestry Ordinance (contained in Article 16 of the Public Works Code), if the removal of a street tree or significant tree is proposed by SFRPD during implementation of the SNRAMP. As also stated on Draft EIR p. 157, no landmark trees are proposed for removal under the SNRAMP.

If removal of a tree is proposed and the Urban Forestry Ordinance applies (i.e., street tree, significant tree, or landmark tree), certain noticing requirements would apply, which are described in detail in Response LU-4, RTC p. 4-216; however, these requirements are not applicable to the noticing requirements for circulation of a Draft EIR under CEQA. Circulation of a Draft EIR, or certification of a Draft EIR for that matter, does not constitute project approval of any kind nor does it allow for tree removal activities. Implementation of the SNRAMP, if approved, and completion of the CEQA process for this Draft EIR, will comply with all applicable noticing requirements.

Refer also to Response G-3, RTC p. 4-19, for a discussion of the independent scientific review that was conducted for the 2005 Draft SNRAMP.

Public Review Period

RTC Section 1.B, Environmental Review Process, p. 1-2, describes the environmental review process including the public review period of the Draft EIR, which is also summarized in this response. CEQA Guidelines Section 15105 prescribes that the minimum public review period for a Draft EIR submitted to the State Clearinghouse for review by State agencies shall be 45 days. Two separate public comment periods were provided for the SNRAMP Draft EIR. Public agencies, organizations, and individuals were invited to provide written comments (letters, emails, and facsimiles) on the SNRAMP Draft EIR during the first public review comment period, which opened on August 31, 2011, and was originally scheduled to end on October 17, 2011. On August 31, 2011, the Planning Department distributed a notice of availability of the Draft EIR, published notification of its availability in newspapers of general circulation in San Francisco (*San Francisco Chronicle*) and in Pacifica (*Pacifica Tribune*), and posted the notice on the Department's website and at the SFRPD's McLaren Lodge. As previously mentioned, the original public comment period was set to close on October 17, 2011, but was extended by the Planning Commission at its October 6, 2011, hearing on the Draft EIR to October 31, 2011, providing a 61-day comment period. Further, the Planning Commission held a public hearing on the Draft EIR on October 6, 2011, during which Commissioners, organizations, and individuals were invited to provide oral comments.

While not standard practice, at the request of the SFRPD, the Planning Department reopened public comment on the Draft EIR. A second 46-day public review comment period was provided from April 27, 2012, to June 11, 2012, during which written comments were also invited. A Public Notice of the additional comment period was sent to over 300 neighborhood organizations and individuals through direct mailing and was also posted in the following locations: SFRPD's McLaren Lodge, the Planning Department, and the San Francisco County Clerk's office. In total, the two public comment periods were open for 107 days, exceeding the 45-day public review period required by CEQA. The Public Notice for the second public review period also was published in the *Pacifica Tribune* and the *San Francisco Chronicle* on May 9, 2012. A link to this notice is provided on both the Planning Department's and the SFRPD's websites. The Draft EIR has been accessible on the Planning Department's website, as the CEQA lead agency, since its publication. Given the two public review periods, totaling 107 days and spanning over a period from August 2011 through June 2012, an additional public review period is not required.

As stated by the comment(s), CEQA Guidelines Section 15087(a) requires that notice of publication of a Draft EIR must be provided by at least one of the follow procedures: (1) publication at least one time by the public agency in a newspaper of general circulation, (2) posting of the notice by the public agency on and off-site in the area where the project is located, or (3) Direct mailing to nearby owners and occupants. As described above, the Planning Department has substantially complied

with these noticing requirements and additional notification as suggested by the commenter(s) is not required.

On July 23, 2012, Wild Equity Institute (WEI) requested that the public comment period be reopened for a third time, citing that they were not aware of the second public review period. While a third public review period was not provided, and it appears that WEI may not have been directly notified by the Planning Department of the second public review period, responses to the July 23, 2012, letter from WEI, which was received after the close of the second public review period, are provided in this RTC document. In addition, responses to all written comments received during the two public review periods and oral comments provided during the public hearing are provided in this RTC document as well.

Public Hearing

The Planning Department held a public hearing on October 6, 2011, to receive oral comments on the Draft EIR. With regards to notification of the public hearing, the Draft EIR Notice of Availability (NOA), containing public hearing information, was distributed weeks in advance of the final Planning Commission calendar, which was and is typically not available until the week before the hearing; the NOA clearly states to call the week of the hearing for a more specific time and provides a phone number. The NOA specifically stated that:

A public hearing on this Draft EIR and other matters has been scheduled by the City Planning Commission for October 6, 2011, in Room 400, City Hall, 1 Dr. Carlton B. Goodlett Place, beginning at 1:30 p.m. or later. (Call 558-6422 the week of the hearing for a recorded message giving a more specific time.)

This information is typically included in the Planning Department notices of availability of draft EIRs because Planning Commission hearings are subject to change. While the Planning Commission meeting time posted on the City's webpage may not have accurately reflected the actual start time, the meeting item for public comment on the Draft EIR was still open at the time of the originally posted start time, giving members of the public the opportunity for timely receipt of oral public comments (Attachment C, Draft EIR Hearing Transcript).

Environmentally Superior Alternative

These comments are correct that Draft EIR p. 2 incorrectly identifies the Maximum Restoration Alternative as the Environmentally Superior Alternative. A detailed discussion of the environmentally superior alternative can be found on Draft EIR pp. 524 to 526.

As also discussed in RTC Response AL-10, RTC p. 4-595, the text on Draft EIR p. 2 (line 8) has been changed as follows:

The ~~Maximum Restoration~~ Maintenance Alternative is the Environmentally Superior Alternative.

Comment G-11 Draft EIR is adequate, accurate, and complete

The response to Comment G-11 addresses all or part of the following individual comments:

City of Pacifica-1-01	CAAONC-1-01	FOW-GGP-1-01
MMSG-1-02	Sierra Club-1-03	Bowling-1-01
Campbell-C-1-01	Campbell-C-1-02	Crouch-1-01
Gerrie-1-01	Hayes-1-01	Holzman-1-02
Holzman-1-03	Kesel-1-01	Kushner-1-01
Langille-1-04	Moseley-1-01	Rafferty-1-02
Rosenthal-1-01	Swenerton-1-02	Wilson-1-01
PH-Skain-02		

- Based on staff research the City Council determined that the report addressed the concerns raised and that the concerns will be alleviated by the actions proposed to be included as a part of the SNRAMP. The City of Pacifica appreciates the work that San Francisco put into the DEIR, particularly in addressing the concerns that had been raised regarding management plan work proposed for Sharp Park. [City of Pacifica-1-01]
- We believe that the Draft Environmental Impact Report for SNRAMP is an adequate, accurate and complete review of the plan. It considers a broad range of potential impacts to our City’ resources and proposes feasible mitigation measures to address impacts where possible. The EIR looks at a range of alternatives and discusses the potential impacts for both natural and recreational amenities of the City’s Natural Resources. [CAAONC-1-01]
- We of “Friends of Oak Woodlands – Golden Gate Park” (FOW-GGP) fully support the DEIR for SNRAMP as an adequate, accurate, and comprehensive review of the Plan. [FOW-GGP-1-01]
- The Draft Environmental Impact Report for SNRAMP is an adequate, accurate and complete review of the plan.
 - Considers a broad range of potential impacts to our City’s resources.
 - Proposes mitigation measures to address impacts where possible.
 - Has been based on detailed studies and scientific experts.
 - Consistent with several directives, including the Recreation and Open Space Element (ROSE), the Public Utilities Commission (PUC) water saving mandates, and the City’s Sustainability Plan.
 - Looks at a range of alternatives and discusses the potential impacts for both natural and recreational amenities of the City’s Natural Areas. [MMSG-1-02]
- The primary objective of the Management Plan, for the Sharp Park natural area, as for the other areas, is the protection of biological resources. However, in its analysis, the DEIR defines the project as that of protecting biological resources while maintaining an 18 link golf course.

The goals and objectives of the project need to be clarified, and the portions of the project related to reconstructing the golf course should either be removed from the DEIR, or the scope of the project needs to be broadened to include both elements. [Sierra Club-1-03]

- I support the Significant Natural Resource Area Management Plan because so much thought, research, and preparation has gone into it. I believe that the Draft Environmental Impact Report for the Natural Areas Management Plan is an adequate, accurate, and complete review of the plan based on detailed studies by scientific experts. It proposes mitigation measures to address any possible adverse effects, and it is consistent with several directives, including the Recreation and Open Space Element, the Public Utilities Commission's water-saving mandates, and the City's Sustainability Plan. It looks at alternatives and discusses the potential effects for both the natural and recreational amenities of the City's Natural Areas as well as potential effects on the City's resources. I believe that implementation of the Plan will help prevent the local extinction of plants and animals, improve habitat for wildlife, increase safety, and improve access and recreational use in Natural Areas. The Plan is the most cost-effective method for managing our resources and protecting these areas for future generations. It provides clear direction to the City on how to prioritize management and restoration of our Natural Areas, and it presents an innovative way to safeguard our City's Natural Areas. This is very important to me, all San Franciscans, and for future generations of San Franciscans. As you know, the mission of the plan is to provide guidelines and amenities for passive recreational uses compatible with natural resources, to identify the causes of adverse effects on habitats, to enhance biological diversity, and to maintain populations of sensitive species. It also aims to inventory the biological resources in our Natural Areas to provide background information for planning, restoration, and management activities; to develop a Geographic Information System database, containing baseline information for each of the Natural Areas; and finally, to provide guidelines for educational, research, and stewardship programs. These are all commendable goals and attainable with the Significant Natural Resource Area Management Plan to guide us. [Bowling-1-01]
- I reviewed the DEIR and feel it is an accurate and complete review of the SNRAMP. The plan reflects years of research and community input, incorporating scientific studies and expert opinions. The plan provides guidance for prioritizing restoration and management, enhancing biodiversity while maintaining populations of sensitive species. [Campbell-C-1-01]
- The DEIR considers a broad range of potential impacts to San Francisco's natural resources while providing guidelines for passive recreational uses compatible with natural resources. In addition, it proposes mitigation measures to address impacts where possible. [Campbell-C-1-02]
- Thank you so much for working towards a reasonable and balanced EIR on SF parkland. I am a pet owner & am being bombed by emails from pet owners and groups (mostly SF Dog) who are trying to stir dog owners up without helping people understand what is being done & why. You guys have a tough job, thanks for sticking with it. Unfortunately most of the

input I am sure you are getting is the result of groups like SF Dog getting people stirred up. [Crouch-1-01]

- I urge the Planning to adopt the SNRAMP DEIR. The report was to analyze the environmental impacts of the NAP. It has done that mostly very well.

It has laid out a compromised approach to Rec & Parks natural areas land management. It is not enough to achieve sustainability at all sites but is doable.

This is a compromised plan and is not extreme or radical. [Gerrie-1-01]

- The Draft Environmental Impact Report for SNRAMP has received a more than adequate and therefore accurate and complete review of the plan. It has considered the total range of potential impacts to our City's open space and uses and how to manage them for sustainability! [Hayes-1-01]
- I feel that the Draft EIR is adequate, accurate and complete and urge you to certify the document without further delay. The Natural Areas Program's mission is to maintain and enhance natural areas in San Francisco and the plan and creators of the Natural Areas Management Plan spent a great deal of time in discussions with the scientific community and citizens of San Francisco to create a plan that best served the citizenry and the critical need of maintaining and enhancing natural areas. The EIR reviewing this management plan considers a broad range of potential impacts to our City's resources and proposes mitigation measures to address impacts where possible to lessen any perceived impacts and recognizes that some impacts may be unavoidable. [Holzman-1-02]
- I believe the EIR accurately depicts the majority of potential impacts that could occur with plan implementation as less than significant and in need of no significant changes to the plan. The management plan in creating the recommended actions considered alternatives and attempted to achieve the greatest good with the least amount of negative impact and I believe this was accomplished and the DEIR attests to that. The initial management plan was based on detailed studies and scientific experts and is consistent with several directives, including the Recreation and Open Space Element (ROSE), the Public Utilities Commission (PUC) water saving mandates, and the City's Sustainability Plan. [Holzman-1-03]
- My comments pertain to the DEIR for the Natural Areas Management Plan (SNRAMP). The DEIR for SNRAMP is an accurate, adequate, and complete review of the plan. It considers a range of potential impacts to City resources and proposes mitigations where possible. This DEIR is based on sound science and expert opinions. The DEIR is consistent with the City's Sustainability Plan as well as other directives. Furthermore, the DEIR addresses potential impacts for natural and recreational amenities in San Francisco's Natural Areas. [Kesel-1-01]
- With respect to the description of the twenty-two natural areas in San Francisco, the DEIR is accurate, thorough and complete. [Kushner-1-01]
- The SNRAMP DEIR, with notable exceptions, does an excellent job analyzing the environmental impacts of the Natural Areas Plan. [Langille-1-04]

- I am writing to give my support to the Draft EIR for the Natural Areas Program. I believe the findings are adequate, accurate and complete and should be accepted by the San Francisco Planning Department. [Moseley-1-01]
- The Draft Environmental Impact Report for SNRAMP is an adequate, accurate and complete review of the plan. Our group looks forward to our ongoing work parties to improve Fairmont Park. [Rafferty-1-02]
- After reading the report in detail, I believe the DEIR to be adequate, accurate, and complete. It is not a radical plan and lays out a reasonable, conservative approach to natural resources management, and considers a broad range of potential impacts to our City's resources. The report should be accepted for the following reasons. It proposes mitigation measures to address impacts where possible. It is based on detailed studies and scientific experts. It is consistent with several directives: the Recreation and Open Space Element (ROSE), the Public Utilities Commission (SFPUC) water saving mandates, and the City's Sustainability Plan. It also looks at a range of alternatives and discusses the potential impacts for both natural and recreational amenities of the City's Natural Areas, which are in dire need of the protection this management plan addresses. [Rosenthal-1-01]
- I believe that the SNRAP DEIR is an adequate, accurate and complete review of the plan is based on detailed, comprehensive research and sound scientific studies conducted by experts. [Swenerton-1-02]
- The Natural Areas Plan goals are excellent. - The SNRAMP DEIR, with notable exceptions, does an excellent job analyzing the environmental impacts of the Natural Areas Plan. [Wilson-1-01]
- The San Francisco portion of the report is thorough, accurate, and adequate.

In its treatment of the 22 natural areas located in San Francisco, the report does an admirable job analyzing the environmental impacts of the Proposed Project, as well as alternatives. In general, the portions of DEIR analyzing the programmatic portions of the plan and routine maintenance are thorough, accurate, and adequate.

I do want to -- specifically to comment on the great work that staff did in preparing this and work done by all the consultants on it. [PH-Skain-02]

Response G-11

These comments generally express support that the environmental analysis contained in the Draft EIR is adequate, accurate, and complete. However, one comment requests that the portions of the project related to reconstructing the golf course should either be removed from the Draft EIR, or the scope of the project needs to be broadened to include both elements.

The limited modifications to the golf course are included in the project description of the SNRAMP Draft EIR. With respect to the golf course modifications, as stated in Draft EIR Chapter III, Project Description, p. 102:

“An upland and wetland habitat corridor between the lagoon and the pond would be constructed with upland features designed to support the San Francisco garter snake; this action would necessitate permanently closing Hole 12 of the Sharp Park Golf Course. Sediment basins would be installed in two locations, one where Sanchez Creek enters a culvert to pass under Highway 1 and the other at the northern boundary of Sharp Park; the former sediment basin would be developed on about half an acre of the golf course (primarily upland Monterey pine habitat), and the latter sediment basin would be expanded onto about half an acre of ruderal and upland Monterey pine habitat.”

Draft EIR Chapter III, Project Description, p. 103, goes on to state that:

“Creating, restoring, and enhancing California red-legged frog and San Francisco garter snake habitat at Laguna Salada would also involve a reconfiguration of some holes of Sharp Park Golf Course and converting a portion of the area currently occupied by the course to Natural Area. Approximately 13 acres of the golf course would be modified to create important upland habitat adjacent to the wetlands for the endangered San Francisco garter snake, to discourage frogs from depositing egg masses in locations where the resulting tadpoles may end up being stranded, and to allow for creation of new wetlands to compensate for those filled during restoration. In order to create a habitat corridor between Horse Stable Pond and Laguna Salada, Holes 10 and 13 would be slightly shortened or narrowed, and the existing Hole 12 would be permanently closed. The habitat corridor would cover approximately six acres, bringing the total of modified area at the golf course to about 19 acres.”

In addition, a new hole would be created near the rifle range/archery course either east or west of Highway 1, which is required by Draft EIR Mitigation Measure M-RE-6, Restoration of the Sharp Park Golf Course to 18 Playable Holes, p. 264. Therefore, the proposed project includes the Sharp Park Golf Course modifications. Furthermore, proposed restoration actions at Sharp Park are not inconsistent with either the CEQA objectives listed on p. 82 of the Draft EIR or the SNRAMP objectives and goals listed on p. 84 of the SNRAMP.

Comment G-12	Objectivity of the EIR
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The response to Comment G-12 addresses all or part of the following individual comments:

Bowman-2-15

Gomez-1-05

Keating-1-03

Kessler-1-01

Kessler-2-01

Rehling-1-01

PH-Keating-01

- In general, I found the DEIR to be biased towards promoting the SNRAMP proposals instead of impartially and scientifically presenting the environmental impacts of the program. It is troubling that RPD spent more than \$1 million for the development of such a flawed SNRAMP and DEIR and that this was done with limited input from the general public who are unlikely to support the costly implementation or the significant changes to the use of 25%

of park land in SF. RPD continually misuses words like “invasive” and “noxious” instead of the more clearly understood “non-native plants” which misleads the public about the types of plants and trees to be removed. RPD also uses “nature” and “natural” and “habitat” which would be more correctly stated as “native plants.” Using these marketing words or codes represents a deceptive tactic that undermines the value of the entire DIER public comment and review process, since the general public is not being made aware of the significance of what is actually planned. [Bowman-2-15]

- Take another look at this plan, obtain viewpoints from geology/ erosion experts outside of SF Park and Rec, and definitely outside of NAP. They are too invested in this plan moving forward to be open to alternatives. One might say - they can't see the forest for the trees! [Gomez-1-05]
- Moreover, I think you should take a close look at the question of whether the staff DEIS report reflects a bias in that it appears based on a series of assumptions all of which favor the natural areas program, rather than a balanced approach where some assumptions end up favoring the program and other assumptions end up favoring recreational access. The DEIS should be a careful balanced analysis rather than an advocacy piece to justify a particular conclusion. [Keating-1-03]
- The current Draft Environmental Report appears to be slanted toward “Native Plant” management, at the expense of other interests. [Kessler-1-01] [Kessler-2-01]
- What NAP plans to do is not sound environmental stewardship, as claimed, but a damaging course of action that could do lasting harm to beloved and much-used urban forests and other recreation areas within the city. The draft EIR minimizes and misleads, not addressing some critical concerns and misrepresenting others, without consideration of the full range of expert opinion and without sufficiently considering community, ecological, and property impacts. The draft EIR does not acknowledge how reduction of trails and of dog-friendly acreage will affect the community, nor does the EIR accurately represent the potential consequences of using toxic pesticides on the health of children. Of course, these pesticides also threaten wildlife directly, and that wildlife also is threatened by the other changes to habitat that the NAP plan includes. The draft EIR does not appropriately address legitimate concerns about erosion, loss of windbreak and shade, and aesthetic consequences of NAP's plans. The draft EIR seems too informed by the voices of NAP staffers protecting their office and their budget and not sufficiently informed by those outside of NAP, but familiar with the areas and issues under discussion. I hope that you will seek out more sources and listen to them objectively, while bearing in mind the well-being of all residents and the importance of managing our parkland in a balanced way. [Rehling-1-01]
- I think your highest duty and your highest benefit you can provide in society is making sure that the staff reports you're getting in the environmental impact reports are straight up. That's all I think you can really do is make -- because you got to rely on your --those reports, but make sure they're straight up, and I don't know the answer to that. I've heard a lot of things both ways. What I suggest generally in other areas I've been involved in are the two easiest ways to find out whether you're getting good, impartial analysis is, one, what are the

presumptions that are being made, the unfounded presumptions? Everyone always makes unfounded presumptions. So to find out whether it's biased or not, find out whether they're all sort of in one favor. Do they make presumptions that always go in one favor, or are the presumptions balanced in valuing recreation versus natural restoration, in evaluating whether these restoration efforts will have adverse short term impacts regardless of the long term impacts? So you look at whether the presumptions all go one way. The second thing I think you look at is what's being considered and what's not being considered. Are they looking at the relevant issues? We have maybe, what, 100, 150 years of managing these parks in our city balancing these issues. I think if you're finding that they're making a radical departure in a general management strategy, you ought to have a heightened scrutiny then. [PH-Keating-01]

Response G-12

These comments express concern that the analysis in the Draft EIR is not objective.

As explained on Draft EIR p. 2, the San Francisco Planning Department has prepared this EIR in accordance with CEQA (California PRC Sections 21000–21177), the Guidelines for Implementation of the California Environmental Quality Act (CCR Title 14, Sections 15000–15387), and the requirements of San Francisco Administrative Code Chapter 31. The EIR identifies significant impacts of the proposed actions (including cumulative impacts), identifies feasible alternatives and mitigation measures that would that would avoid or substantially lessen significant impacts, and includes improvement measures to further reduce impacts identified as less than significant. The EIR reflects the independent judgment of the Planning Department.

One commenter indicated that the terms “invasive” and “noxious” have been misused and the more clearly understood term “non-native plants” should be used. As provided in Executive Order 13112, an “invasive species” is defined as a species that is nonnative (or alien) to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.²⁹ On the contrary, in North America, nonnative species are generally considered species that were not present in an ecosystem prior to European settlement.³⁰ A majority of nonnative species cause no harm, and some are even beneficial. In the SNRAMP, the SNRAMP Draft EIR, and this RTC document, every effort has been made to draw a distinction between invasive species (meaning those that could be harmful) and nonnative species (meaning those that are not harmful and introduced after European settlement). A noxious weed is any plant designated by a Federal, State, or county government as injurious to public health, agriculture, recreation, wildlife, or property.³¹

²⁹ www.invasivespeciesinfo.gov/docs/council/isacdef.pdf, accessed on September 14, 2015.

³⁰ <http://www.nps.gov/plants/alien/bkgd.htm>, accessed on September 14, 2015.

³¹ http://www.blm.gov/wo/st/en/prog/more/weeds/weed_definition.print.html, accessed on September 14, 2015.

One commenter states that the EIR does not acknowledge the impacts of closing trails or dog friendly acreage on the community, the environmental impacts of using pesticides, or impacts on erosion, shade, loss of windbreaks, and aesthetics. The Draft EIR addresses impacts from pesticide use in Section V.I, Hazards and Hazardous Materials; wind, windthrow,³² and shade effects in Section V.E, Wind and Shadow; and aesthetic impacts in Section V.C, Aesthetics. Erosion effects are addressed in the Initial Study (Draft EIR Appendix A). The commenter has not provided substantial evidence³³ that significant adverse environmental impacts other than those described in the EIR would occur nor does the commenter raise specific environmental issues about the adequacy or accuracy of the analysis contained in the EIR.

As discussed in Response G-5, RTC p. 4-31, social impacts of a proposed project are only considered significant if there are associated physical effects on the environment. Refer also to Response RE-13, RTC p. 4-347, for a discussion of the effect of the reduction of DPAs on other DPAs in terms of recreational capacity; refer to Response G-25, RTC p. 4-106, for a discussion of dog impacts related to erosion; refer to Response HZ-1, RTC p. 4-531, for a discussion of the use of pesticides in the Natural Areas; refer to Response AE-1, RTC p. 4-219, and Response AE-2, RTC p. 4-223, for a discussion of the aesthetic impacts related to tree removal, brush piles, and brown vegetation; and refer to Response WS-1, RTC p. 4-309, for a discussion of wind impacts related to tree removal.

Comment G-13	Sharp Park analysis piecemealed regarding sea wall and golf course redesign
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The response to Comment G-13 addresses all or part of the following individual comments:

Sierra Club-1-10

WEI-1-04

- “Piecemeal” Planning Process for Sharp Park.

It can reasonably be inferred from the DEIR that the project, as currently envisioned, involves, in addition to the Laguna Salada restoration, both the reconstruction of the golf course and reconstruction/fortification of the seawall. However, these elements of the project, as well as the analysis of the recycled water component to provide irrigation for the golf course, are all treated as independent “projects” for CEQA purposes. Especially as the proposed project in this DEIR will result in the radical transformation of the hydrology of

³² As stated on Draft EIR page 244, windthrow is used to describe the effects of wind on a stand of trees. When the wind blows a tree over, this action is called windthrow.

³³ As defined in CEQA Guidelines Section 15384, “‘Substantial evidence’ as used in these guidelines means enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached. Whether a fair argument can be made that the project may have a significant effect on the environment is to be determined by examining the whole record before the lead agency. Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence.”

Laguna Salada into a below sea-level frog pond, it is improper to treat these items separately, as is currently the case. [Sierra Club-1-10]

- **The DEIR piecemeals the environmental assessment of Sharp Park by delaying assessment of the future of Sharp Park's sea wall and ignoring the existing alternatives' relationship to a long-term golf course redesign.**

The DEIR recognizes that the future Sharp Park's sea wall is subject to considerable uncertainty. As explained in the ESA/PWA report, sea level rise induced by climate change, along with storm surges and erosion, all make it infeasible to retain a sea wall at Sharp Park as it is currently designed. Only two options are available to the City: armoring the sea wall at Sharp Park, or allowing the sea wall to revert over time to a naturally managed coastal system.

Yet while these alternatives are acknowledged in the DEIR, the DEIR expressly delays consideration of these impacts to some unknown point in the future. Specifically, the DEIR states that while these alternatives have been considered by SFRPD, "those options are not proposed as part of the SNRAMP. Thus, they are not addressed in this EIR." DEIR p. 103. But the DEIR is intended to guide management at Sharp Park for the next 20 years – a timeframe in which meaningful impacts to the sea wall may occur according to the ESA/PWA report, and which if the City fails to address could irreversibly harm the endangered species at Sharp Park, the existing infrastructure at Sharp Park Golf Course, and the surrounding communities. By failing to consider this impact presently, the City is piecemealing the environmental review for its plan at Sharp Park to retain an 18-hole golf course at Sharp Park on a permanent (relevant to the SNRAMP timeline) basis.

The DEIR makes this problem express on p. 527, where it states that full natural restoration alternatives at Sharp Park "have been rejected because they are not compatible with the existing and planned 18-hole layout of the historic golf course." (emphasis added) Yet the planned golf course is not part of the DEIR environmental assessment – this is classic piecemealing of project to avoid cumulative, long-term, or complete environmental analysis of a project proposal. This can only be remedied by segregating out the Sharp Park section of the DEIR and subjecting it to a full and thorough environmental review as required by CEQA. [WEI-1-04]

Response G-13

These comments express concern that the EIR "piecemeals" the analysis of the proposed actions at Sharp Park by not including potential proposals for the seawall, golf course, and recycled water projects. These comments address actions that are not proposed as part of the SNRAMP.

Draft EIR p. 103 acknowledges that options for addressing current and future conditions of the seawall have been considered, but those options are not proposed as part of the SNRAMP. Because a solution for the seawall has not been proposed, speculating on that solution or solutions is not appropriate for the CEQA analysis; therefore, evaluation of potential actions to address the effects of sea level rise on the seawall in the cumulative impact analysis is not appropriate at this time. Effects

of the proposed project in combination with SFPUC's recycled water and potential cumulative effects of sea level rise on Sharp Park project are addressed in the EIR's cumulative analysis (refer to Draft EIR p. 381). The Draft EIR concludes that over the long term, sea level rise could result in significant environmental effects but that the SNRAMP would not result in a cumulatively considerable contribution to sea level rise impacts.

While areas currently within the Sharp Park Golf Course are included as part of the Sharp Park wetland restoration project and will become part of the Natural Area at Sharp Park, these changes are appropriately addressed in the impact analyses for the project in the Draft EIR. Specifically, Hole 12 would be closed and restored as coastal scrub/grassland habitat to support the San Francisco garter snake. Sediment basins would be installed in two locations, one where Sanchez Creek enters a culvert to pass under Highway 1 and the other at the northern boundary of Sharp Park; the former sediment basin would be developed on about half an acre of the golf course (primarily upland Monterey pine habitat), and the latter sediment basin would be expanded onto about half an acre of ruderal and upland Monterey pine habitat. While other golf course modifications would occur, such as shortening holes, creating a new hole near the rifle range/archery course east of Highway 1, and raising fairways to prevent flooding and discourage frogs from depositing egg masses in locations where the resulting tadpoles may end up being stranded, these areas would not become part of the Natural Areas at Sharp Park.

Approximately 13 acres of the golf course would be modified to create important upland habitat adjacent to the wetlands for the endangered San Francisco garter snake, to discourage frogs from depositing egg masses in locations where the resulting tadpoles may end up being stranded, and to allow for creation of new wetlands to compensate for those filled during restoration. In order to create a habitat corridor between Horse Stable Pond and Laguna Salada, Holes 10 and 13 would be slightly shortened or narrowed, and the existing Hole 12 would be permanently closed. The habitat corridor would cover approximately six acres, bringing the total of modified area at the golf course to about 19 acres.

The impact to Hole 12 of the golf course as a result of the wetland restoration project has been identified and evaluated, with a mitigation measure formulated to address the impact on the playability of the 18-hole golf course (refer to Draft EIR p. 261 and pp. 264 to 269). In response to the comment regarding the environmental assessment of the golf course in the Draft EIR, the environmental impacts of the mitigation measure that would require restoration of the playability of the golf course was analyzed in the Draft EIR on pp. 264 to 269. It was determined that the impacts of the mitigation measure could be reduced to a less-than-significant level if the replacement hole would be located west of Highway 1. Neither the wetland restoration project nor the mitigation measure proposes a wholesale redesign of the golf course. Draft EIR p. 527 acknowledges that SFRPD identified alternatives to the golf course layout; however, SFRPD has not proposed a wholesale redesign of the golf course. The text on Draft EIR p. 527 (first paragraph) has been changed for clarification, as follows:

As part of the Sharp Park Conceptual Restoration Alternatives Report, the SFRPD ~~proposed~~ identified restoration alternatives that would be compatible with either a nine-hole layout at the Sharp Park Golf Course or with removal of the golf course entirely. These alternatives have been rejected because they are not compatible with the existing and ~~planned~~ continued 18-hole layout of the historic golf course.

Comment G-14 Historic Preservation Commission review of future project under the National Environmental Policy Act
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The response to Comment G-14 addresses all or part of the following individual comment:

HPC-1-05

- The HPC also commented that it is likely that future projects involving federal permitting or funding will be reviewed and commented on by the Commission as part of the National Environmental Policy Act (NEPA) process. [HPC-1-05]

Response G-14

This comment asserts that it is likely that future projects with a federal nexus will be reviewed and commented on by the HPC.

The comment addresses additional environmental review processes that would be required following the CEQA process and does not request changes to the text of the document.

4.A.3 Dog Play Areas

Comment G-15 GGNRA Activities (Unrelated to the SNRAMP)

The response to Comment G-15 addresses all or part of the following individual comments:

NPS-1-10

NPS-1-11

Fitzer-1-01

Fitzer-1-05

- General Comment (pg. 443): Please correct description of acreage open to dog walking at Funston; 200 acres is not a correct figure. Please contact Shirwin Smith of my staff at 561-4947 for a correct acreage figure. [NPS-1-10]
- General Comment: GGNRA is instituting a survey this fall to evaluate potential for redistribution onto other areas both within and outside the park resulting from implementation of the dog management plan and will share that those survey results with RPD. [NPS-1-11]
- Please support the Save the Off-Leash walking Areas in the GGNRA.

Since our daughter graduated Lowell High School, we do not have a place to go to meet people and socialize. We have met many friends from our daily off leash dog walks at Ft. Funston. For us, it is our form of exercise, away to relieve the day's stress, our daily dose of fresh air. Our walks are as important to us as they are for our dogs. For me, it is a way to exercise and enjoy our beautiful city and the ocean air. I always take our out-of-town guests

for a walk and show off our beautiful city and the Fort. Our guests are always amazed at how lucky we are to have this spot to go to walk and run our dog Wanda.

Please tell the GGNRA to stop pushing its extreme proposal that will negatively impact so many of us who live in the Bay Area with our wonderful pet dogs. Our dog is a rescue. We don't know her breed, but we do know that her daily run is very important for her and for us.

Why is the GGNRA insisting on this extreme proposal that would eliminate a main form of recreation that takes place at these recreation areas? Doesn't the GGNRA have an obligation to respect the legislation that created these areas by managing them as urban recreation areas, not as pristine wilderness areas?

I understand that Congress could resolve this conflict by codifying the GGNRA's original 1979 Pet Policy as a Section Seven Special Regulation, and mandating that all properties added to the GGNRA after 1979 maintain historical recreational access.

The GGNRA dog management proposal has nothing to do with safety or the environment-it's part of a pattern of GGNRA bureaucracy that denies more and more and people/activities access to parks.

There so many more important issues that could use the time and money that is being spent on trying to close off-leash dog areas. Before our city and country goes to the dogs ... leave well-enough alone and start focusing elsewhere.

Thanks for your attention to this matter. [Fitzer-1-01]

- Parts of Ft. Funston have already been shut off since we first started walking there in 1998. These closures have had a negative impact on the natural resources in the existing areas where we can walk. I not only think that Ft. Funston should remain an off-leash area, I also think the ares that were closed off should be opened up.

Lastly, I would like to say that many dog-less people come to Funston just to be with and play with dogs. just yesterday, while walking our dog at Funston, I met a dog-less Dad who took his 2 small kids Ft. Funston so that his kids could see and pet the dogs there. They couldn't have a dog where they lived and his kids were thrilled to be able to be able to run with and pet the dogs. It also gave the Dad a chance to teach his kids how to behave with dogs, to ask, "May I pet your dog ? " and "May I feed your dog this treat ? " etc., [Fitzer-1-05]

Response G-15

These comments state that the Golden Gate National Recreation Area (GGNRA) is instituting a survey to evaluate the redistribution potential occurring from implementation of its Dog Management Plan and identifies information and data to be provided to SFRPD, and it also requests a minor change to the amount of available off-leash DPAs at Fort Funston. Additional comments state that many people without dogs visit Fort Funston and, as such, it should remain an off-leash area.

The GGNRA (including Fort Funston) is neither under the management of the SFRPD or under the jurisdiction of the San Francisco Recreation & Parks Commission, and it is also not part of the SNRAMP project. The decision to allow Fort Funston to remain an off-leash area is under the purview of the National Park Service.

As stated on p. 339 of the Supplemental EIS (Fall 2013)³⁴ for the GGNRA's Dog Management Plan, the National Park Service (NPS) conducted a survey in the summer of 2012, the GGNRA Dog Walking Satisfaction Visitor Study to evaluate the perception of and satisfaction with the current dog walking policies, and the potential for redistribution of use based on access changes resulting from implementation of a new dog management regulation for GGNRA. The survey was conducted to respond to public comments received on the Draft GGNRA Dog Management Plan/EIS. Of the approximately 7,000 individuals contacted for the survey, 897 responded. Respondents included 662 dog walkers, 20 commercial dog walkers, and 212 individuals who do not walk dogs at the park. General satisfaction with the visitor's park experience was captured in the survey using the following categories: "not at all satisfied," "slightly satisfied," "moderately satisfied," "very satisfied," and "completely satisfied." Of the dog walkers who responded to the survey, 431 individuals (64 percent) indicated that they were "not at all satisfied," "slightly satisfied," or "moderately satisfied," with on-leash dog walking opportunities at the park. These same respondents were then asked if they would go (inside or outside GGNRA) somewhere else as an alternative site. The five most popular San Francisco alternative sites for on-leash dog walking included Pine Lake/Stern Grove, Golden Gate Park (all areas), McLaren Park, and Alta Plaza. Regarding satisfaction of off-leash dog walking, 659 respondents (98 percent) stated they would be moderately satisfied or less if they were not able to walk their dogs off leash at the sites they frequent now. When asked if they would go somewhere else to walk dogs off leash, the five most popular alternative sites indicated by those respondents for off-leash dog walking included the four San Francisco park sites: Pine Lake/Stern Grove, Golden Gate Park (all areas), McLaren Park, and Alta Plaza. Of these four San Francisco park sites, the SNRAMP is proposing to reduce the size of the DPA in McLaren Park. The SNRAMP Draft EIR analyzes the effects of DPA closures proposed by the SNRAMP in combination with the GGNRA Dog Management Plan in the cumulative analysis of various environmental topics.

As requested, the text on Draft EIR p. 444 (line 6) has been changed as follows:

Fort Funston, located approximately 8,000 feet (about 1.5 miles) from the existing Lake Merced DPA has approximately ~~200~~160 acres open for off-leash dog use.

³⁴ National Park Service, U.S. Department of the Interior, *Golden Gate National Recreation Area Draft Dog Management Plan/Supplemental Environmental Impact Statement*, Fall 2013. This document is available online at: <http://parkplanning.nps.gov/document.cfm?parkID=303&projectID=11759&documentID=55416>, accessed June 7, 2016.

Comment G-16 Dog problems result from lack of monitoring, lack of enforcement of existing leash laws, and lack of responsibility from dog owners

The response to Comment G-16 addresses all or part of the following individual comments:

GGAS-1-14

GGAS-1-15

GGAS-1-20

GGAS-1-27

Bartley-1-08

Griggs-1-01

Kushner-1-04

Pfister-1-07

- The DEIR and the SNRAMP suffer from the larger problem endemic to San Francisco's management of dog-related activities. Though all city parks permit dogs only on-leash and off-leash in designated off-leash areas, non-compliance with leash requirements is rampant. Despite that dogs are regularly allowed to run off-leash throughout nearly every park in the city, off-leash dogs continue to oppose even reasonable restrictions on dogs in the few Natural Areas covered by this Project. [GGAS-1-14]
- In any event, any Dog Play Area in any Natural Area should be fully enclosed or otherwise well-marked. Enclosures provide dog owners with a clear explanation of where off-leash activity is appropriate. Enclosures also restrain dogs from activities that may result in significant, negative impacts on native wildlife and plants in the Natural Area. Finally, enclosures reduce conflicts with other park users and other dogs. [GGAS-1-15]
- Give the priorities of the Natural Areas Program, it is appropriate to prioritize protection of wetlands and creek channels above dog-related recreation. Staff should ensure effective implementation of this management measure by monitoring dog-related recreation in the area and enforcing leash requirements. A failure to enforce leash requirements will result in the ineffective implementation of this measure. [GGAS-1-20]
- While the DEIR does not identify any inconsistencies with the San Francisco Dog Policy, Golden Gate Audubon notes that San Francisco's failure to fully implement the Dog Policy does create ongoing and serious conflicts with the priorities of the NAP. (See DEIR, at 155-156) The lack of adequate enforcement of the Dog Policy, especially in sensitive areas where leashes are required or dogs are excluded, has perpetuated conflicts between different users of the park system in San Francisco and exacerbated impacts to local wildlife and plants. The DEIR should include provisions requiring active compliance monitoring and enforcement of the policy to ensure that the application of the Dog Policy is consistent with the NAP. [GGAS-1-27]
- It is time for the city to enforce existing dog owner laws including the requirement of licenses. These license fees pay for our understaffed and overwhelmed Animal Care and Control Department. Lack of enforcement is seen as a dereliction of duty from this citizen's point of view. [Bartley-1-08]
- The main problem is one of enforcement however. Dogs are already regulated by the rule either on leash or under voice control of owner. Obviously this is often not the case. It may require simply having officers or rangers on the ground watching over the beaches and parks in a more substantial manner. In all cases of my dog encounters, there has never been

anyone of authority nearby. I now carry pepper spray with me and will use it. I know of no other solution for the time being. [Griggs-1-01]

- “Dog activity in DPAs is an existing use, and the SNRAMP does not propose increasing this activity; however, closing or reducing DPAs under the SNRAMP could intensify dog use in the remaining DPAs. In addition, because resources to enforce leash laws are limited, dogs would likely continue to be let off leash in parts of Natural Areas outside of DPAs, even though that activity is prohibited. As a result, dogs may currently be impacting and may continue to impact protected plant species in or near DPAs. Pet owners may contribute to disturbance via trampling. As a result, implementation of the SNRAMP could have significant adverse impacts on these species.” This conclusion is very odd and out of sorts with the intent of CEQA. A more appropriate conclusion would be the mitigation that the Recreation and Parks Department enforce leash laws more adequately. The department has a beefy Parks Patrol division that could certainly be used to enforce leash laws, with fines that strongly encourage compliance. [sfweekly.com – article attached] [Kushner-1-04]
- “The SFRPD welcomes dogs on leashes in most of its parks; dogs are allowed off-leash in 19 designated areas.” Off-leash dogs are an important threat to biological diversity in the parks. There needs to be more enforcement of the leash law to limit off-leash activity to the designated areas. [Pfister-1-07]

Response G-16

These comments request monitoring dog-related recreation in the parks and a stricter enforcement of leash laws.

Many parks, with or without DPAs, are experiencing a lack of compliance with existing leash and pooper scooper laws. The reasons for the lack of compliance include, but are not necessarily limited to (1) park users who are unwilling to be compliant, even when confronted by SFRPD staff or fellow park users; (2) a lack of SFRPD patrol resources to fully monitor all parks for compliance; and (3) park users who are not aware of leash and pooper scooper laws. Enforcement of the existing leash laws is an ongoing City responsibility that is beyond the sole management control of the NAP staff and the SNRAMP.

In the SFRPD Final Dog Policy (SFRPD 2002) (also referred to in this document as the “Dog Policy”), the SFRPD states that enforcement would necessitate a multi-agency effort to include the San Francisco Police Department (SFPD), the SFRPD, and Animal Care & Control (ACC); however, the SFRPD believes that the greatest voice for following established rules and policies will be from DPA partners and users.

Refer to Response PD-23, RTC p. 4-198, for a discussion of the SFRPD’s policy and the Draft EIR’s conclusion and mitigation measures for monitoring DPAs for impacts caused by dogs, as well as the various options available to prevent or reverse those impacts, and Response G-25, RTC p. 4-106, for a discussion of potential impacts of dogs on plants and wildlife.

Comment G-17	Impacts of people within Natural Areas
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The response to Comment G-17 addresses all or part of the following individual comments:

CFDG-1-04	DogPACSF-1-05	SFDOG-2-06
Bartolotta-1-05	Brown-1-02	Chambers-1-02
Demetrious-1-04	Kelly-1-02	Naima-1-03
Vitulano-1-04		

- The NAP EIR does not differentiate between impacts caused by people with dogs and impacts caused by people without dogs. Do people in the natural areas with dogs cause significantly more impacts than people in the natural areas without dogs? Clearly a 200-pound person will have a much more significant impact on plants than a 20-pound dog. Because this was not evaluated in the EIR, the analyses presented in the NAP EIR are inadequate. If there is little difference in impacts, then the EIR cannot justify banning dogs from the natural areas. [CFDG-1-04] [DogPACSF-1-05] [SFDOG-2-06] [Bartolotta-1-05] [Brown-1-02] [Kelly-1-02]
- The EIR does not differentiate between impacts caused by people with dogs and impacts caused by people without dogs. For example, a 200-pound man will have a much more significant impact on plants that he walks on than a 20-pound dog will have on any that it walks on. If there is little difference in the impacts, then the EIR cannot justify banning off-leash dogs from natural areas. [Chambers-1-02]
- To that end, I believe that erosion and similar effects are more pronounced with human activity, and I feel that channeling the traffic with more regularly maintained trails is a good way to change the causes of negative effects on the land. There grows from that a greater, more frequent presence and adjustments are more easily made at a smaller scale to foster the positive outcomes in natural areas health and maintenance before bad outcomes have caused critical damage. [Demetrious-1-04]
- the NAP EIR does not take into account the damage caused by people or children [Naima-1-03]
- I personally see much more damage from people without dogs - especially kids hanging out, breaking glass, littering, The EIR should identify which percentage of impacts are attributable to dogs versus humans. [Vitulano-1-04]

Response G-17

These comments express concern that the Draft EIR does not analyze the environmental impacts of humans versus that of dogs.

To clarify, the Draft EIR does not propose to close or reduce DPAs because of a potential environmental impact identified in the Draft EIR. Rather, the SFRPD has proposed, as part of the project, to close the Lake Merced DPA and to reduce the size of two other DPAs. The EIR, therefore,

analyzes the environmental impact of this action. The Draft EIR analyzes the impacts of closure and reduction of DPAs along with the potential for increased use by humans (visitors) and dogs.

The EIR concludes that the proposed closure and reduction of DPAs would not result in significant impacts to recreational resources (Impact RE-1 and Impact RE-4 on Draft EIR pp. 256 to 258 and 259 to 260). However, when combined with impacts resulting from the GGNRA Dog Management Plan, the EIR conservatively determines that the cumulative impact of these two projects could accelerate the physical deterioration of the remaining DPAs and in the Natural Areas, in general (Impact RE-7 on Draft EIR pp. 261 to 262; Impact RE-7 was further clarified and expanded in Response RE-2, RTC p. 4-313). With respect to increased use of the Natural Areas by visitors, the EIR finds impacts to recreational resources to be less than significant (Impact RE-1, Impact RE-4, and Impact RE-7). Refer also to Response RE-13, RTC p. 4-347, for a discussion of the effect of the reduction of DPAs on other DPAs in terms of recreational capacity.

With regard to biological resources, the EIR finds that impacts to protected species, their habitat and sensitive natural communities (including wetlands and riparian habitat resulting from increased visitors), and use of the Natural Areas by dogs would be significant, but would be reduced to less than significant with implementation of Draft EIR Mitigation Measure M-BI-1a, Protection of Protected Species and Riparian and Wetland Habitat, p. 298. The EIR also concludes that cumulative biological impacts resulting from the proposed project in combination with the GGNRA Dog Management Plan could be potentially significant and unavoidable (Draft EIR pp. 345 to 346). The Initial Study found erosion-related impacts to be less than significant (Initial Study pp. 111 to 118).

Increased use of the Natural Areas is discussed throughout the Draft EIR, including, but not necessarily limited to, Draft EIR pp. 256 through 259 (“Increased Use of Neighborhood and Regional Parks”); Draft EIR pp. 261 through 263 (cumulative recreational impacts caused by increased use); Draft EIR p. 292 (“Projects implemented under the SNRAMP can be categorized as either routine maintenance or programmatic projects involving large-scale weed removal, large-scale erosion control projects, trail modification, or other projects involving an increased use of an area”); Draft EIR p. 294 (“Operational impacts associated with the SNRAMP include increased foot traffic in areas of new trail creation”); Draft EIR p. 443 (“Implementation of the proposed project could result in a minor increase in vehicle trips from Natural Areas Program staff vehicles and visitors due to increased use of the Natural Areas”); and Draft EIR p. 444 (“The Natural Areas could experience increased use because of the improved trail system”).

Other impacts related to dog use are addressed throughout this RTC document, including, but not necessarily limited to, Response BI-9, Contamination from dog urine, RTC p. 4-383; Response G-24, Data on disturbance to breeding birds at Lake Merced dog play area, RTC p. 4-95; Response G-26, Social impacts of dog ownership and reduced dog play areas, RTC p. 4-114; and Response RE-13, Effect of the reduction of DPAs on other DPAs in terms of recreational capacity, RTC p. 4-347.

Therefore, the Draft EIR appropriately analyzes the environmental impacts of the proposed SNRAMP, its potential to increase visitor use and dog use, and identifies mitigation measures where such effects could result in significant environmental impacts. The comments do not present substantial evidence that the analysis in the Draft EIR is inadequate or inaccurate.

Comment G-18 Disagree that dog walkers should be limited to seven dogs
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The response to Comment G-18 addresses all or part of the following individual comment:

Tondelli-1-01

- I am writing to you as a concerned professional dog walker and resident of San Francisco. I strongly feel that the new proposed legislation restricting professional dog walkers to a maximum of seven dogs is simply disadvantageous for dogs, responsible dog owners, professional dog walkers, and the city of San Francisco. Dog walkers provide an invaluable service that many dog owners rely on to keep their dog well exercised, sociable and mannered. Furthermore, professional dog walkers help keep parks and recreation areas clean and maintained. I am not in opposition of regulating professional dog walking; in fact I support it as the industry is growing and regulation is long overdue. However limited the number of dogs to seven simply is not financially sustainable for myself and other professionals in this industry. The loss in income from losing one full time client is approximately \$6,500 per year, which is a significant portion of my income. I feel that I speak for all dog walkers in the city of San Francisco when I say that there is nothing I would love more than to continue providing this necessary service in a professional manner, however this proposed legislation is something that I may not be able to overcome financially. I believe the most beneficial course of action is to follow the recommendation of the Commission of Animal Control and Welfare of San Francisco. The ACC proposes that professional dog walkers should be limited to eight dogs and adhere to strict, professional business practices including a thorough permit process, education and accountability. Eight dogs is a very reasonable limit that a professional dog walker can certain handle with professionalism and attentive care, and also is more financially sustainable. Please consider revising the proposed legislation to concede with the eight dog limit recommendation from the San Francisco ACC. I truly feel that this is the most beneficial to all parties who participate in dog walking services, including other park users. [Tondelli-1-01]

Response G-18

This comment expresses the opinion that the new legislation restricting professional dog walkers to a maximum of seven dogs is disadvantageous for dogs, responsible dog owners, professional dog walkers, and the City of San Francisco. The comment addresses an issue that has been legislated by the City, but is not within the scope of the SNRAMP. The SNRAMP does not propose limits to the number of dogs a dog walker can walk.

Comment G-19 Support for maintaining or expanding amount of dog play areas/Opposition to reducing DPAs

The response to Comment G-19 addresses all or part of the following individual comments:

DB-1-01	SFDOG-2-04	SFSPCA-1-01
Adams-L-1-01	Ahlberg-1-01	Beberman-1-01
Browning-1-01	Browning-2-01	Browning-3-01
Buffa-1-02	Butler-1-01	Carrington-1-01
Cech-1-01	Cerf-1-02	Chase-1-01
Chasnoff-1-01	Corvan-1-01	D'Antonio-1-01
Demetrious-1-02	Devine-1-01	DeWitt-1-01
Donovan-1-04	Dotz-1-01	Emanuel-1-02
Emanuel-2-02	Fasman-1-02	Form Letter-1-07
Form Letter-1-08	Form Letter-1-11	Form Letter-1-12
Form Letter-1-13	Form Letter-1-14	Form Letter-1-15
Form Letter-1-17	Form Letter-1-18	Form Letter-1-21
Form Letter-1-28	Form Letter-1-31	Form Letter-1-32
Form Letter-1-33	Form Letter-1-35	Form Letter-1-37
Form Letter-1-38	Form Letter-1-39	Form Letter-1-40
Form Letter-1-47	Form Letter-1-49	Form Letter-1-52
Form Letter-1-53	Gachowski-1-01	Garnett-1-01
Gordon-1-02	Greenberg-1-01	Grim-1-01
Hammer-1-01	Hartnett-1-01	Hershkowitz-1-01
Hochschild-1-01	Hooker-1-02	Huebsch-1-02
Hull-1-01	Jake-1-02	Karpa-1-01
Keats-1-01	Kenealy-1-01	Kind-1-01
Kovinsky-1-01	Lee-P-1-01	Litehiser-1-03
Lundeen-1-01	Lynch-1-01	Madar-1-01
McCalla-1-01	Miller-J-1-01	Miller-N-1-01
Minsuk-1-02	Monagle-1-01	Mundy-1-01
Norton-1-01	O'Neill-1-01	Olliphant-1-01
Perrins-1-02	Perry-J-1-01	Popoff-1-01
Pruitt-1-03	Quinn-1-02	Raffaelli-1-01
Randt-1-01	Reque-1-01	Rodriguez-1-01
Roman-1-01	Salamone-1-01	Schlund-1-01
Scott-1-03	Sebastian-1-01	Sharp-1-01
Simons-1-01	Skippy-1-01	Smith-1-03
Stevenson-1-01	Stewart-M-1-01	Sutch-1-01
Vitulano-1-01	VonErb-1-01	Werger-1-01
Woo-1-01	Zendarski-1-01	PH-Pittin-01

- Dog Walkers and dog owners are the biggest reason McLaren Park is now a safe place to take your dogs and kids. Drug dealers and other undesirable people felt uncomfortable using the park and stayed away because of the dogs.

In my opinion, McLaren Park was designated a “dog park” and should remain so. All the other dog parks should remain without change to preserve the sanity. [DB-1-01]

- Without any demonstrated evidence of impacts from dogs, there is no justification for excluding people with off-leash dogs from natural areas. There is, therefore, no justification for the closure of the DPA at Lake Merced, nor for the reductions in the DPAs at McLaren Park and Bernal Hill. [SFDOG-2-04]
- decreasing or eliminating off-leash play areas is not fair to the responsible residents who choose to bring their dogs with them to public parks, and doing so would greatly decrease their quality of life. [SFSPCA-1-01]
- I am completely against the elimination or reduction of city dog parks by San Francisco Department of Parks and Recreation. Dogs and their owners need MORE space for off-leash recreation, not less. Returning parks to their natural, original state should NOT be the goal of a parks and recreation department of a major metropolis. Many needs must be balanced and it is unfair of you to ignore the needs of 150,000 dogs and their owners who reside in San Francisco, especially since a major federal agency (GGNRA) is trying to eliminate off leash recreation from a major part of their land. I urge you to abandon your Natural Areas Program and let people go to nearby natural areas like Big Basin, Yosemite, or Muir Woods, for example, if they are looking for an experience in nature that they can't find in a city. But please, don't try to make San Francisco into Yosemite. [Adams-L-1-01]
- I am writing to express my deep concern over the above-referenced plan, which threatens to reduce and even eliminate many of the city's dog-play areas. As a person who struggles with severe depression and bipolar disorder, being able to spend time with my dog outdoors and seeing her run free contributes to my regime of mental health. This may sound trite, and I realize that it's difficult to understand mental disorders, but finding ANY way to smile is a big challenge for people like us. My dog is my 100% true companion, and she is sensitive to my moods and patterns. By keeping a “smile” on her face, she keeps a smile on mine. [Ahlberg-1-01]
- If you are forced to restrict dogs from certain areas, I request that you add an equal or greater amount of acreage adjacent to the DPA. I also ask that dogs be permitted to play in the reservoir at McLaren.

Dogs play a vital role in the life of the city and ours does in our family. The exercise and joy she brings would be challenged if we lost access to those areas, especially McLaren. [Beberman-1-01]

- I am writing you today to beg you to reconsider the plan to eliminate or reduce off-leash dog areas in the city. These areas are so important to the mental and physical health of our dogs and our people. Please don't let this flawed report by the NAP convince you to take such drastic measures. Please be the voice of reason. You must listen to the howling of the dogs and the people! [Browning-1-01]
- I implore you to reconsider the NAP EIR plan. I have 3 dogs, all of them rescued, and I the off-leash areas in the bay area are crucial to their well-being. I take them to Ft. Funston,

Bernal Hill, McLaren Park, Alamo Square Park, Glen Park, Dolores Park, Alta Plaza Park, Golden Gate Park, Esprit Park, McKinley Park and Stern Grove. I am diligent about picking up after my dogs, and about making sure the dogs are not destroying the vegetation. I pick up after other people's dogs when I see it has been left there. Even if you don't care about dogs, you must recognize that eliminating these areas will have a SIGNIFICANT negative impact on the people who live with these dogs. Please do not let this happen. [Browning-2-01]

- PLEASE, PLEASE, PLEASE don't do this! The NAP EIR seems to be biased speculation; how can you drastically reduce the off-leash dog areas for thousands of dogs based on speculation? Please consider the impact of this plan on the citizens and the remaining dog parks. DO NOT DO THIS! I am begging you! [Browning-3-01]
- I am a dog owner, like so many other San Francisco residents. The Natural Areas Program already plans to eliminate dog play areas in San Francisco city parks, and if it is expanded, it could eliminate large swaths of off-leash dog walking areas at McLaren Park and Bernal Hill. I walk my dogs in these parks and appreciate the fact that they are large enough that I can get some exercise while also exercising my dogs. If these large off-leash areas are made smaller or eliminated, it will negatively impact me and thousands of other dog enthusiasts in San Francisco. Meanwhile, there is currently no way for San Francisco residents to propose new dog play areas in city parks. Thus the NAP could take away our current areas and leave us with no way to propose new dog play areas. [Buffa-1-02] [Cerf-1-02] [Hooker-1-02] [Minsuk-1-02]
- We are opposed to the elimination of off-leash dog walking as proposed in the NAP EIR.

We have walked our dogs off-leash since 1989 without incident or without harming the natural habitat of many of the parks, including Glen Park, Bernal Heights, McLaren Park, as well as the GGNRA Beach areas – Fort Funston, Crissy Field & Ocean Beach.

We walk our dogs as our way of enjoying the parklands. As taxpayers, we are opposed to NAP's attempts to stop us from exercising and enjoying the parks, especially since there is no proof that dogs off-leash cause harm to plants & wildlife.

Those of us who walk dogs are a community and it is a diverse & fun community where we get to interact with people from all backgrounds and form bonds & friendships. DPA closures would severely impact this and for no clear reason! [Butler-1-01]
- I am a San Francisco resident of many years standing now and for a long time have also lived with and roamed with a dog. I wish to go on record against the proposed restrictions. First, if one were to look at old photographs of this City there were sand hills and rather barren landscape in many of the areas now being proposed for "restoration." This city needs to respond to the needs of its current residents and not turn its back on us. [Carrington-1-01]
- I'm writing to voice my concerns over closing and reducing public access areas where I can exercise with my dogs. We need more areas not less, that's why there's pressure on the few areas we can go. [Cech-1-01]

- I'm not a resident of SF, but a frequent visitor. I don't quite understand why SF is looking to drastically restrict off leash access for dogs in the park lands. SF has some wonderful extremely open lands that have been preserved. To consider these "natural" areas is a bit over stating the reality. They are open space, but have long since been transformed from wilderness as a result the urbanization around the area. You could consider this to be a shame, but actually its part of the history of the city. I don't believe anyone in New York City is hoping to return natural habitat back to central park. I think some restriction to offleash dog access is reasonable. For example, if you have an athletic field, its annoying to have offleash dogs to start chasing balls when a soccer team is playing - and of course, nobody wants to step in dog poop in a picnic area. If SF Parks wants to make ON leash access to dogs a general policy, then please set aside generous, fenced, off lease areas. People who use dog park areas tend to be frequent users of the park, and even become a sub community. If you foster this sense of community among the users of off lease dog areas, you'll find the community will police and pick up after itself. This is my observation as a participant in a few informal dog play areas. [Chase-1-01]
- I am writing to express my utter dismay that the city would consider eliminating our ability to bring dogs to several of the city's parks. I walk my dog many times a week at Bernal Hill. It is full of people walking their dogs, and one of the only nearby areas where dogs can run off leash. With all the problems facing our city, I think it is insane to make it harder for dogs, which there are more of than children in San Francisco, to have an opportunity to run and exercise, not to mention the enormous physical and mental health benefits to their owners of that exercise as well. Part of why I felt okay about raising a dog in the city is that I thought I could count on there being off leash facilities near my home where both I and my dog could get exercise. Your potential actions threaten that and I see no good justification for prioritizing some return of some plants over the use of the parks by residents and their pets. [Chasnoff-1-01]
- I am a long time resident of San Francisco. I am writing to express my deep concern about the proposed cuts to off-leash dog walking areas in the City. If off-leash areas are restricted it will mean more dogs, squeezed in to less space. This could lead to increased aggression and will negatively impact the environment.

One of the things I love most about San Francisco is how dog friendly it is. Dogs are an integral part of many families in the City. They help ensure that families get out and exercise, and provide much valued company for many elderly residents. Dogs give us so much, please don't take away their space. [Corvan-1-01]

- I have lived in San Francisco for all of my 61 years and have always been a responsible dog owner. I live right next to McLaren park where I can let my "well behaved" dogs run free for a little bit each day. I am very respectful of those that are afraid of dogs and put their leashes on. The neighborhood I live in (ma Ct.) has a person with two huge pit bulls and they are stuck on a 6 x 6 deck at all times. In all the years I have lived here I have only seen them out for a walk once and that's pretty pitiful to do to dogs. Having said that, she is the same person that calls the cops on my dogs if I try to play ball with them in the cul-de-sac, therefore their only play time is in the park. Time & money would be better spent on

something “important” and not leashing up our dogs. I live in the last house and the lot next to me is completely vacant. This city has gotten to be so dreadful with all the rules and regulations. Please don’t make me leash my dogs for the 15 minutes they get to be free. [D’Antonio-1-01]

- I can understand, then, the urgency in maintaining a level of integrity to these areas in the urban milieu. The effects of human activity and traffic is doubtless a prominent issue. In that regard, what concerns me is the closure of dog play areas. I am not convinced this is the best option. One reason why is that so many DPA’s are in or adjacent to natural areas, and I’m afraid it would set a precedent which would be overly restrictive to the dog/human population. [Demetrious-1-02]
- Your recommended closures and limits on off leash dog areas is unfair & unwarranted in this economic struggle. These areas are large enough to have both natural areas for dogs to run in and places where natural habitats and endangered species can keep a foothold. Try putting some attention to the needs of the elderly, children & homeless. There are so many more important issues that really impact the quality of life of our citizens.

As a founder of Greenpeace SF, a lifelong member of Sierra Club, Audubon Society, Nature Conservatory, CA Native Plant Society and many others, I have a good understanding & appreciation for the needed balance between use, & destruction of ecosystems. Please do not take away these places in our Bay Area where families and furry friends can run free, feel the sunshine on their faces, get exercise & feel proud that our government officials can understand and support what it means to go take a walk in the park. [Devine-1-01]

- I am writing about the plans to eliminate dog play areas that are adjacent to NAP areas. I have two large dogs who need exercise (ie running off leash on a regular basis) and I need the exercise I get when taking them for walks in recreational dog play areas. I have been walking my one dog in Bernal Hill for years, and he and I both love it. We are respectful of the plants and stay on the trails where they exist, and I feel like dogs are an important part of the area, so many people from San Francisco go there and seem really happy, enjoying the view, and letting their dogs get the exercise of running, which they cannot do on leashes.

Native plants are important, and I am myself a native plant lover, however I do not see restricting dog access as the solution to the problem of establishing native plants in San Francisco. [DeWitt-1-01]

- I implore you to keep these spaces available for all San Franciscans and their dogs. [Donovan-1-04]
- I writing to register my profound objection to the closure of any part of Bernal Hill to off-leash dog recreation. I have been a homeowner living 2 blocks from Bernal Hill park since 1994 and have been a dog owner for all but 2 of those years. For all of those years I have been using the hill to exercise my dog and myself.

I am also a passionate environmentalist. I am constantly delighted to see the variety of native wildlife found on the hill and have seen no evidence that it is impacted by the presence of off leash dogs. I regularly witness the presence of ground mammals such as squirrels, raccoons

and possum (its a beautiful walk at night). There is a thriving raptor community that hunts on the hill. We even had a coyote living on the hill one year. None of these species would be present if of leash dogs were a problem.

I appreciate the need to protect our native wild lands, but the continued closure of parkland to off leash dog exercise does not address the genuine human damage caused by pesticide use, urban crowding, off road biking, etc. Dogs have become a scapegoat. And should these closures go into effect who is going to enforce them? The city and county of San Francisco does not have the resources to manage the regulations already on the books. Why burden the government with additional, meaningless regulatory responsibility. [Dotz-1-01]

- However, any program implemented should not reduce or eliminate current recreation access in any way. Specifically, I object to the proposed reduction of dog play areas at McLaren Park, Bernal Hill and Lake Merced, especially in consideration of the proposal by the Golden Gate National Recreation Area proposal to ban people with dogs at most of the recreation areas it manages in San Francisco. [Emanuel-1-02] [Emanuel-2-02]
- I am a dog owner, like so many other San Francisco residents. The Natural Areas Program already plans to eliminate dog play areas in San Francisco city parks, and if it is expanded, it could eliminate large swaths of off-leash dog walking areas at McLaren Park and Bernal Hill. I walk my dogs in these parks and appreciate the fact that they are large enough that I can get some exercise while also exercising my dogs. If these large off-leash areas are made smaller or eliminated, it will negatively impact me and thousands of other dog enthusiasts in San Francisco. Meanwhile, there is currently no way for San Francisco residents to propose new dog play areas in city parks. Thus the NAP could take away our current areas and leave us with no way to propose new dog play areas. San Francisco is a city with limited open space. I rely on the open spaces we do have to get out into the outdoors and get some exercise. We cannot afford to give up recreational space in San Francisco to make way for more native plants. Less recreational space will negatively impact the quality of life in our city. [Fasman-1-02]
- I think dogs should be of leash because they should have the right to they have feelings and thoughts like us [Form Letter-1-07]
- I can't throw a ball with my dog on a leash!! And I'm responsible enough to pick up after her?? Much like other dog owners! [Form Letter-1-08]
- When you (GGNRA) were asking for my support, you were saying that you would protect my open space areas from development, that you (GGNRA) would protect my right too continue to recreate in the ways that I have since my birth. Dog walking is my only source of recreation/excersize. You (GGNRA) are adding to my mistrust of government. Stop The Lies! [Form Letter-1-11]
- Well exercised dogs are less stressed and better behaved in public. This is also better for public safety. [Form Letter-1-12]
- I am 100% for off leash not fair to our dogs of SF CA [Form Letter-1-13]
- Dogs need open space also! [Form Letter-1-14]

- I use city parks and would like them to stay off-leash [Form Letter-1-15]
- Dogs off leash are better socialized! [Form Letter-1-17]
- We need off leash areas for our dogs to play! [Form Letter-1-18]
- I walk in city parks. Taking away access for my dog and I impacts my ability to have the health benefits and quality of life living in this area. This is a huge social outlet for me. [Form Letter-1-21]
- Most dogs are not disruptive. To curtail their activities, i.e. keeping them on the leash actually creates more behavioral problems with canines ... [Form Letter-1-28]
- These proposed closures will negatively impact my life. I might have to move away from SF if implemented. [Form Letter-1-31]
- Please keep Golden Gate Park oak woodland safe for dogs and legal off leash. [Form Letter-1-32]
- Please don't take it away! [Form Letter-1-33]
- Keep parks for everyone, it's what make this livable! [Form Letter-1-35]
- As a disabled person I am concerned with the loss of accessible opportunities for me and my dog. [Form Letter-1-37]
- Pls keep off leash available. [Form Letter-1-38]
- We need open spaces for BOTH dogs and people to spend time. DON'T take the parks away from the animals & people. [Form Letter-1-39]
- Keep off leash available *PLEASE*!!! [Form Letter-1-40]
- For our generation, keep dog areas open [Form Letter-1-47]
- Dogs are better dogs with off leash time. [Form Letter-1-49]
- I am a responsible dog owner & pick up/clean up after my dog. I appreciate the environment as much as my dog & if it weren't for off-leash parks, we would not have a place to run & exercise freely. Please, keep parks off leash & I will keep it clean. Thank you. [Form Letter-1-52]
- Keep them open! [Form Letter-1-53]
- To hear that the areas to walk dogs off leash are planned to be reduced leads me to wonder if the plan was really thought through to the impact it would have. I would like to know if the it was taken into consideration that people who walk their dogs off leash actually use a park more than people who do not walk a dog off leash? On any given day, no matter the weather, you will find a person walking their dog off leash, whereas a person who is walking for exercise will opt to walk at a mall or on a treadmill. So by restricting off leash dog walking you really are restricting an individuals right to exercise. [Gachowski-1-01]
- I am sad to hear that there are people that wish to change this and i believe that they don't understand how important and how vital off leash recreation is for the well-being of dogs

and their families. My family is so much happier and alive when we can walk our dogs at places like Fort Funston and Stern Grove. Off-leash recreation has my full support. Please let me know if I can provide any additional information. [Garnett-1-01]

- I am a dogowner and dogwalker, and I use the off-leash dogwalking areas in Bernal Hill and McLaren Park on a daily basis. I recognize the importance of native plant preservation, but I don't feel that it's appropriate to prioritize these projects in urban parks at the expense of these tremendously popular off-leash dogwalking areas. I feel that the first and foremost mission of urban parks should be to promote recreational opportunities for the citizens of San Francisco, and, since so many of us enjoy exercising with our dogs, off-leash dogwalking areas should at the very least be maintained in their current state. Additionally, given that citizens of San Francisco currently have no means of proposing new off-leash areas in parks, the reduction of current dog recreation areas would increase use of remaining areas, possibly to the point of negatively impacting them. [Gordon-1-02]
- I wanted to submit my comments regarding the elimination of close to 80% of dog play areas. I live in San Francisco and am a responsible dog owner. It makes it increasingly difficult to remain a responsible dog owner if the city continues to eliminate dog play areas. I believe most dog owners agree that our pets are like parts of our family and residents of San Francisco love living here. Please keep our dog play areas available so we can continue to love both our family pets and living in San Francisco.

I understand the desire to keep the habitat natural and not have dogs ruin that. In fact I support it. But eliminating the dog play areas is not the way to do it. I bet if you ask the dog owner community that uses these dog play areas they will be more than willing to help encourage the growth of natural plants in any way possible. Whether it be enforcing the boundaries of the dog play areas or contributing to the cause financially. Please help us keep our dog play areas available to us. [Greenberg-1-01]

- As a San Francisco resident and dog owner for 16 years I'm appalled at the proposed changes to off leash dog play areas in SF parks based on NAPs EIR. They don't seem to have any hard facts that dogs, indeed, cause erosion and harm to natural areas. In my own experiences at Fort Funston I've seen massive dune damage done by teenagers and their parents "sledding" down the dunes. With a growing number of families adding dogs to their households any reduction of outdoor off-leash play areas would be negatively impactful on the spaces that do remain. I regularly use Glen Diamond park, Bernal Hill, Holly Park, MacLaren Park and Fort Funston to walk with my dogs and often observe dog owners picking up trash and performing plant maintenance. The negative impact of reducing available off leash play areas would be detrimental for EVERYONE [Grim-1-01]
- I am a dog owner and a dog lover, as are thousands and thousands of others in SF. The plan by the Natural Areas Program Plan is seriously flawed and must be stopped. There is no proof that dogs are destroying the natural areas. Don't allow these anti-dog people to ruin it for thousands of people and their dogs. We need to be able to continue taking our dogs to Ft. Funston, and Bernal Hill, and McLaren Park and all the other off-leash areas. Dogs are an important part of our society. Please listen to the dog owners. Thank you. [Hammer-1-01]

- As a resident of SF, and owner of a dog, I think of SF as a dog friendly city. Your wanting to restrict off leash areas is ridiculous. You should be looking to increase off leash areas. [Hartnett-1-01]
- I understand this is a “hot-button” issue for so many folks on both sides. I understand both arguments and seek a healthy compromise. Your leadership is crucial. First, don’t forget the monte of all responsible politicians – if it is not broke, don’t fix it. Second, if there are serious issues and concerns requiring some action, let’s think of ways to address specific problems, including perhaps: 1) better fencing of our parks; 2) City-provided doggy poop bags; and 3) Park and Rec lead clean-up days in which the dog owners could be put to work to keep the parks in nice condition. [Hershkowitz-1-01]
- As a lifelong San Francisco resident with both a young child and a dog, I’m writing in support of maintaining the current off-leash areas. While it’s wonderful that areas are being restored, let’s allow all San Franciscans the opportunity to enjoy our parks. There are already very limited areas allowing dogs off-leash so would be great if they could be maintained at current levels. My mother, Christie Hochschild joins me in voicing our support for off-leash areas as well. [Hochschild-1-01]
- I request that you drop your plan to close the parks to dogs for habitat restoration. There are many, many dog owners in San Francisco. I believe that dog owners will vote their interests and there is no reason to assume that the SF Planning Department is beyond the influence of the will of the voters. [Huebsch-1-02]
- I am dismayed to learn that these dog walking areas are being considered for closure or reduction in size. Why would any urban city seek to discourage the health of its families? [Hull-1-01]
- The NARMP EIR acknowledges that the NARMP plans to close 15% of the DPAs in city parks immediately, when added to the GGNRA’s desire to cut off-leash access by 90%, will have a disastrous cumulative impact on remaining off-leash areas in city parks and on recreation - however, the EIR does not analyze what that cumulative impact will be. This is a huge deficiency in the NARMP EIR! [Jake-1-02]
- My off-leash times with my dog are virtually the only times I ever use the GGNRA. Please let us keep the R in GGNRA. [Karpa-1-01]
- Ten times the space allotted to dog play is already restricted for people with dogs; in other words, we have use of one-tenth the space. If you dare to take even more space away, people with dogs may rise up to demand true representation of our actual real demographics by City employees rather than tolerating the way some City employees seem to represent only the interests of a small minority who unrealistically want to simulate wilderness in the middle of a major urban center at the expense of local people and their dogs.

Although many of us pay taxes for public schools and do not begrudge a penny of it, all we need is open space for people and our canine family members. [Keats-1-01]

- Please do what you can to preserve or expand off-leash dog walking space in San Francisco parks. I don’t own a dog, but my children and I like seeing dogs roaming freely in our parks

and support the rights of our dog-owning neighbors to enjoy our parks while letting dogs be dogs. [Kenealy-1-01]

- I am very much opposed to the NAP that would close the Lake Merced dog play area and reduce off-leash dog recreation on Bernal Hill and in McLaren Park. I believe enough land has been set aside for the preservation of native plants within our urban environment. These are areas where residents of San Francisco, myself included, regularly walk with their dogs and their children. [Kind-1-01]
- Open offleash is already so limited and busy. Please don't curb access. [Kovinsky-1-01]
- I am writing you in regarding on some of the public parks closures to dogs environmental impact report (EIR). I am asking you do not take away this beautiful city San Francisco provides to people and dogs. Dogs need places to run just like people need open space for outdoor activities. Dogs do not ask anything from human and they do not have voice. Let them have what nature can provide to them. [Lee-P-1-01]
- I have a dog and use many of the parks listed in the EIR report for dog play recreation. McLaren Park is my favorite park for off leash recreation. The park is large and has ample trails and areas for dog walkers. The park has struggled for years with perceptions of isolation and unsafe conditions. The introduction of large numbers of dog walkers in the past decade has increased park safety-- more people, more eyes on the trails-- has seen a big increase in people feeling comfortable walking alone in the park. This is also backed up by crime statistics. [Litehiser-1-03]
- Dog parks add to a community and as a friend of mine Amy Breeze once said "dogs make people more human." I have seen this over and over again and have experienced this myself. In a world when it seems most people are texting, talking on their smart phone or have head phones on and do not interact with each other, in dog parks you will see just the opposite. We are a little more "human" when we are at the dog park and educating park users and having guidelines for dog parks makes a difference, just take a look at Point Isabel across the bay the largest off leash dog park in the nation managed by East Bay Regional Parks District. [Lundeen-1-01]
- Hey this dog stuff is way crazy...I am opposed to this for many good reasons. Live and let live... [Lynch-1-01]
- Please preserve the few off-leash areas left in the city for our pets – it's important to us! [Madar-1-01]
- I implore you to not support a plan that will reduce the amount of off leash dog areas in this city and it's surroundings. When you consider the sheer number of active dog owners in the bay area you quickly realize that the existing off leash open space areas are already at a minimum. One visit to Fort Funston or Crissy Field on any given weekend day (or week day, for that matter) will give you an idea of the massive volume of dogs that enjoy it. Reducing these types of areas will force other areas to become dangerously crowded. Another group of people who will be severely impacted are the dog walkers. What do you think will happen to these professionals when their "office" is reduced so drastically? I speak from experience

when I say that the number of ill mannered dogs and, hence, ill mannered dog owners, are the minority. And I wish for there to be consequences for those folks. Perhaps the threat of fines could be introduced to discourage bad behavior (people who let their dogs out of their site, bring overly aggressive dogs, do not pick up their dogs waste, etc). [McCalla-1-01]

- I want to add my voice to the objection of closing all DPAs in Management Areas 1 and 2. If they, and those spaces like them, SF will become an even more difficult place to live in. The desirability of living in this city is closely tied to the ability to escape with my dog in not only 'non-urban' spaces but the variety of environments to do so. In my experience, those people that respect the non-dog people, environment, and picking up after their dogs are the vast majority. Like in any group, there are careless people (with kids, cars, bikes, etc) and education is an ongoing process! [Miller-J-1-01]
- In reference to the Natural Areas Program desire to limit or deny the presence of people with dogs, I am very concerned that any group would wish to deny another group's right to freedom of recreation. We have co-existed peacefully. We, the dog owners, do not wish to deny the NAP their rights, and I sincerely hope that we can both peacefully continue to enjoy our rights as we have in the past. [Miller-N-1-01]
- It will bring such great sadness to so many people and families to have these areas closed off to people and their dogs. So much of the world has been walled off in my 70-year lifetime. We need to be able to walk, hike and take our dogs with us so we can still feel our relationship to the Earth. These are almost sacred places for us, and our lives will greatly impoverished without them. [Monagle-1-01]
- I am in favor of expanding and opening new dog off leash play areas. [Mundy-1-01]
- As a concerned citizen and owner of a well-trained dog (puppy 1&2, SFSPCA animal assisted therapy, SFSPCA agility 1&2) it is of vital importance that we maintain the status quo of current off-leash dog areas in San Francisco. By reducing the current size and/ or number of off-leash dog play areas, 1) the potential to introduce crowding (an environment where dogs can often get aggressive) and/ or 2) Force owners to utilize marginal areas which could end up causing more degradation of NAP areas; grows. [Norton-1-01]
- First, as always, this plan would seriously restrict off-leash dog-walking areas available. I am a 64-year old woman who walks daily in McLaren Park with my two dogs. It is a matter of health and well being for us all that we can walk up and down hill for considerable distances. My doctor is always pleased to hear that I am getting this regular exercise-my dogs are inspiration, companion and, should it be necessary, protector. To deny them access to the wonderful open space we now enjoy in McLaren Park would be to deny me an important avenue for maintaining my health. I am sure this is true for many people throughout San Francisco. [O'Neill-1-01]
- I needn't tell you about the positive impacts dogs have on our community. Dog owners make our city's parks safer (e.g. look at the history of Dolores Park). I'm writing to encourage you to think through alternatives to closing off leash dog runs, particularly given that the draft environmental impact statement by the Golden Gate National Recreation Area has

already shown no direct link between dog walking and any environmental damage in GGNRA lands. [Olliphant-1-01]

- I am a dog owner and resident of San Francisco for the past 11 years. I appreciate the recreational space we have in the city to exercise my dog and to feel these health benefits myself, especially at Bernal Hill. We adopted our dog from the San Francisco SPCA and by nature of her herding breed she is a high energy dog that requires considerable running daily. We see this exercise as maintaining her good health and is the secret to her behavioral well-being. Like most residents in this city we do not have our own garden and completely rely on the recreational space of parks for exercise for canine companion. If the dog play areas described in the The Natural Areas Program are to be eliminated in San Francisco city parks, where will we go with our dogs? And will this be a continuing trend where we will lose more areas in the future? The reality is that San Francisco is a city of dogs, and dog lovers who are largely responsible contributing citizens. Please consider alternative areas to our recreational space to grow more native plants. Together we can support both efforts. [Perrins-1-02]
- I am opposed to the closure of the DPA on Bernal Hill, McLaren, and Lake Merced.
We have lived in Bernal Heights for 13 years, just a block from the Hill down Wool Street. We have three dogs and two kids, and our entire family relies on access to this incomparable recreation space. It is integral to our urban quality of life.

With more dogs than children currently living in San Francisco, we need to find ways to encourage healthy, sustainable use of our open spaces, not restrict dogs to more confined sites. A whole host of problems will come of that kind of crowding.

Please keep Bernal, McLaren, and Lake Merced open to dogs and people. [Perry-J-1-01]
- One of the joys of living in San Francisco is the availability of so many dog-friendly areas, both on and off leash. Since we live in the western part of the city, most of our walks take place there. It's a huge concern to me that so many dog play areas are being threatened by the Rec and Park Department's proposed Natural Areas Program. I have been a member of the years of both the Sierra Club and the League of Conservation voters, so I am very aware of the impact on the environment of various activities. However, I don't believe that restricting off-leash recreation in this urban setting and replacing it with "natural" flora is the best decision. [Popoff-1-01]
- The EIR's arguments to remove off leash dog areas are not solid and ignore the actual usage of these areas by the city's inhabitants. The EIR's analysis is incomplete and bases many arguments on "potential" negative impacts not on data. Who is present in the parks in sunshine and inclement weather 365 days a year? People with dogs are. With the health department's focus on obesity, how can a plan like this that limits access to recreation areas be accepted? People often acquire dogs to get them out into nature, get them exercising and get them socializing. It's scientific fact that dogs help reduce stress and blood pressure in people. Shouldn't we try to improve life where we live instead of reduce its quality? The SPCA argues that dogs need off leash areas to keep aggression down in dogs. The dog

community in San Francisco is well known and provides great sense of belonging and community to many neighborhoods. To repeat a statistic I'm sure you know, there are more dogs in San Francisco than children. This reflects the importance of dogs in the lives of the city's inhabitants, voters, tax payers or however you want to describe us. EIR's are to take into consideration the impact on the communities that surround the areas in question and this one does not. I ask how can a dog chase a ball on a leash? I have suffered from mobility issues over the past year due to injuries (as do many of our dog owning residents, especially the elderly or disabled, a large dog owning population in my observation), and if I had not had access to areas where my dog could run free, the situation would have been inhumane. While I could get around enough to pick up their waste, providing the necessary exercise was medically not recommended or possible. [Pruitt-1-03]

- Also, do not restrict off leash access for dogs. Exclusion is not going to solve any problem. History shows, however, it always does. San Francisco is a tolerant, inclusive city, which is what makes this city feel more European than most. Go to London, off leash is the norm at all the wonderful parks. The experience increases the inhabitation of the parks, which are beautiful, and the gross of people and spread of dogs makes them safe and lovely. Restricting off leash access is simply discriminatory. Look at who is out there walking dogs. The majority are older people. Notice the sense of community this builds. These people are out getting exercise, meeting people, building community. Please, take actions that strengthen unity and community rather than tear it apart. [Quinn-1-02]
- I oppose, in the strongest terms, any expansion of the Natural Areas program at the expense of existing off-leash areas. Areas which are off-leash areas are multi-use; I see other people who are not dog owners using the park, and we all co-exist nicely. Designating the off-leash areas as Natural Areas would affect more people than just the dog owners.

It is disturbing to me that there is no way to propose new dog play areas, should any curtailment occur, and in any case the approval process is sure to take years and leave dog owners who own dogs now without recourse. [Raffaelli-1-01]

- I'm a pet/dog owner in the city of San Francisco, and I understand that there are park areas that may be closing soon--or are up to discussion regarding closure. I won't be able to attend the meeting on October 6, but I want to note my support for dog parks in the city: both on-leash and off-leash areas (for dogs under voice command); the GGNRA's newest policy amendments to reduce spaces for dogs has been very disconcerting as a pet owner. Places like Muir beach and other notable spots in the Bay Area may soon become off limits. [Randt-1-01]
- I urge the city not to further restrict the areas where dogs are allowed to run free. Far and away the majority of dogs are pleasant and friendly. A few dogs have been badly trained, but they can be (slowly) removed from the parks. And some people just don't like dogs, or are worried about small children. These folks can easily avoid the free dog areas, there's a lot more park space just for people. I'm not a dog owner/guardian, but I do like dogs. [Reque-1-01]

- I am a responsible dog owner. I represent 99% of all dog owners. There is only a small percentage that gives us a bad name, as in any area. If my dog can't run around free, I don't know how I would be able to consume her energy? Dogs need to RUN freely! Secondly, these walks are as much for my dog's health as they are for mine.

Please let's keep our parks for all, dogs and people. [Rodriguez-1-01]

- Please support off-leash dog walking in the GGNRA and NOT limit current areas. I walk my dog daily, yes daily rain or shine, in either Crissy Field or Land's End. We enjoy walking together off-leash. My dog is trained to remain nearby and to respond to my recall. I pick up her waste and we keep to the trails. The NAP EIR does not convince me putting dogs on leash will have a favorable impact nor does off-leash walking have any unfavorable impact. In addition, I've observed much unfavorable impact by people using these areas such as walking through native plants without regard as well as other negative items such as loud music or leaving behind trash. It seems that there are many negative aspects attributed to off-leash dog walking and dog owners that simply are not true or untested. Confining all dogs to smaller off-leash areas will not be tenable. There simply does not seem to be enough land devoted to be able to accommodate all the dogs in the city during reasonable used times. Off-leash space is needed and some workable manner can be accommodated. [Roman-1-01]
- I am sure that you have heard all of the comments from hundreds of dog owners in Sf but here is just one more. I adopted my dog over six years ago during a time when both of my parents were quite ill and ultimately passed away. The breaks that my dog and I took at Fort Funston and Chrissey Field beach walk together for a run off leash was liberating for both of us and quite literally helped us to remain strong for my parents. Please help us not lose this most magnificent gift to allow us all to be free. I do understand with a great gift comes great responsibility to be good custodians of the land which I am. I will also continue to be vigilant and outspoken to those that I see breaking the rules. Please help us to save this gift for the 99% who do a good job instead of removing it for the 1% who are just not careful people. [Salamone-1-01]
- NAP reduces the amount of space available for off-leash dog recreation. The dog population is increasing, so this is a clear step in the wrong direction [Schlund-1-01]
- Native Areas are off-limits to people, dogs, and almost any type of recreation. The new proposal could close up to 80% of the legal off-leash space in SF city parks. Added to the new dog management proposal by the GGNRA, the limits on dogs would be severe and unwarranted considering the number of people who wish to walk their dogs in city parks and pay to maintain those parks. [Scott-1-03]
- Please save current off leash areas for dogs. Also add more since there is not enough. There are many dog owners that follow rules and there have been more & more places posted in neighborhood parks: No Dogs Allowed. [Sebastian-1-01]
- As a dog owner and frequent visitor of dog park areas I would like to request that you reconsider the closure of any such spaces. The dog park space my dog utilizes is an integral part of his socialization. [Sharp-1-01]

- It's so important that those of us who share this beautiful part of the world remember the word "share." Dogs and dog people are part of a community of extremely varied interests. For decades, San Francisco has worked to balance and blend those interests – not just informally but under the law. The city's Natural Resource Areas Management Plan could tip that balance away from the needs of the city's responsible guardians and their dogs and undermine their quality of life. [Simons-1-01]
- I am a dog owner and not only should we keep, but we should expand, our dog parks. [Skippy-1-01]
- In my own small back yard, I grow native plants, never use pesticides or fertilizer, allow certain weeds to grow just because of butterflies, let bushes get overgrown for birds, try to grow sunflowers for bees etc. I would like to see more of this type of thing encouraged for the backyards of San Francisco, but I am very much opposed to closing areas where people now go with dogs or with their children (or both!) to devote to more native plant areas. [Smith-1-03]
- I wish to submit my strong objection to the proposal to limit off lease areas in the San Francisco.

Please have more consideration for the benefits derived from people being able to keep and exercise animals. This seems a little far fetched to me that animals could have such a negative effect on the environment as to want to ban their being able to run loose entirely. The worst fights I have witnessed were in enclosed dog parks like the one in Golden Gate Park. It makes big dogs predatory, small dogs fearful and owners with dogs that are problems tend to bring their dogs to enclosed areas. [Stevenson-1-01]

- Please don't take away dog play space from me (and my dog, Otis!).

Actually, it'd be useful if you could first explain what the problem is re: Dog Play Areas ... I've never heard of anybody saying anything but terrific things about them. Why are people chipping away at these? They're aware that we have more dogs than just about anything else in SF, right?

Dog Play Areas make San Francisco an amazing place to live. Please, keep them all – or expand them. But don't turn this magnificent city into Brisbane by deleting them. [Stewart-M-1-01]

- I'm writing to ensure that off leash areas for dogs are included in the voices about how we should manage our natural resources in San Francisco. It should be clear that green areas are crucial to a sociable and healthy city. San Francisco benefits greatly from not only allowing its citizens to be dog owners, but to increase the health of pets and the owners. Many dog owners receive their exercise by walking around with dogs and many of our citizens who can't easily make it out of the house due to anxiety or other issues are coaxed from the house and encouraged to walk more and longer. This effect can't be duplicated by on-leash walks. Even breeds that are smaller and normally are considered lap dogs benefit from a long run and impart their health on their owners. Well exercised dogs are happier, healthier and exhibit a positive impact on the people of a city and their social and mental

health. By having legal places for dogs to run you encourage owners to be more proactive about registration and shots through the calming hand of social pressure. Making off-leash illegal or squeezing it into the shadows this will result in more people who are law-abiding citizens today becoming a concern for enforcement later. Please keep our off-leash areas safe – they are in the city’s best interests. [Sutch-1-01]

- I’m writing to express concern regarding the proposal to reduce access for me and my dog for recreation activities and spiritual well-being - the two main uses for me in SF’s parks. Hiking with my dog is a main source of exercise for me - it keeps me active and allows me to enjoy nature. I especially enjoy observing the changes that occur with the seasons, such as the many varied mushrooms that sprout up after the rains in the Winter, and the flowering trees in the Spring. I frequent McLaren Park and Bernal Hill, as well as Golden Gate Park and several other parks. [Vitulano-1-01]
- It is ridiculous that your org. keeps attempting to close parks and open state and federal land to dogs and their owners. Some time ago SF govt. put section 8 units all over the city opening up the way to theft, property and civilian harm. We only have our trusted dogs to assist us in protecting ourselves from harm. Dogs, like people, must exercise to remain healthy. If there are no places in the city with wide open spaces to run and play and eliminate then we, the owners, will be forced to use our neighbors lawns and other private property to achieve this function. If you expect the voters in the bay area to vote in improvements for fire and police and parks in general then STOP this outrage against the people of the Bay Area and San Francisco in particular. It is high time that the needs of, We the People, are considered by our elected and appointed officials. Look at what is happening all over America as well as in San Francisco and Oakland. The people are tired of all this oppression and REVOLT is going to be the only answer to situations like this. LEAVE OFF LEASH AREAS ALONE AND CREATE MORE SPACES FOR US, THE DOGS AND THEIR OWNERS, TO OCCUPY. [VonErb-1-01]
- Hello- I was working late last night and was not able to get an email to youI am a sf voter/homeowner/business owner and am completely against the nap plan to take over off leash dog areas- there are more dogs than children in San Francisco and the dogs need a place to go. Especially with all that is happening with the ggnra, it boggles my mind to think that the city would ok this action. What’s even more distressing is that most dog owners don’t realize that it’s happening. I take my dogs to McClaren park and bernal hill regularly and those offleash dog areas need to remain as such. I am disheartened that this issue is a constant battle. I would think that the city would realize how many dogs are here and how important they are to their owners - who by the way, are the residents and voters of San Francisco. [Werger-1-01]
- I writing to express my opposition to the GGNRA Draft Dog Management Plan. We need place to take our dogs for off leash dog walk. It’s vital for our health and our dogs health. Most of the parks-city, state, federal-are either on leash only or does not allow dogs at all. Off leash area is so limited and few. We need those spaces. Please do not take away these spaces but instead expand it. There are 4 millions perfectly adoptable pets being killed in shelters each year. We need to encourage caring people to adopt these pets and we need to give them

a place from the to enjoy time with their dogs off leash. Imagine having to live on leash all your life. You wouldn't want that for yourself. Why make our dogs? Please please leave our off leash areas alone. [Woo-1-01]

- Please realize that dog walking is a wonderful form of exercise both physically and mentally. This is true for both me and Winston. As I would never propose closing parks to people due to the small percentage of people who vandalize and litter, let's not close the parks to off-leash due to a small percentage of irresponsible dog owners. The majority of dog owners are good stewards of the parks of San Francisco and are responsible, caring people.

I think it is interesting to hear arguments of how dogs have a negative impact on the parks when the facts listed in their own reports prove otherwise. The beauty of urban parks are the diversification of activities that take place nearly every day.

Please do not be swayed by the small minority of narrow minded individuals who do not understand the true pleasures of urban living! [Zendarski-1-01]

- I don't think that this applies to the National Areas Program. As a senior, whose primary – okay, whose only exercise is walking with my dog, I feel that the increased removal of our shared open space is – by the Natural Areas Program, which is a single purpose exclusionary program, will drive more and more local residents into increasingly smaller areas for exercise, access, and enjoyment of our San Francisco landscape.

I oppose this unfettered increase of the Natural Areas Program into more and more of San Francisco's parkland and open space, and I ask that you all, as members of the planning commission, recognize that this program removes shared space from the community on the basis of sharply and scientifically contested assumptions about what is native or natural and makes equally unfounded assumptions about what actions, such as walking with one's pooch, can or cannot occur in our shared and all-too-limited San Francisco open spaces.

Please oppose any expansion of this program. [PH-Pittin-01]

Response G-19

These comments all express support for maintaining, rather than reducing or closing, DPAs within City parklands. Some commenters also question whether dogs cause damage to Natural Areas. One commenter expressed opposition to the GGNRA Draft Dog Management Plan. Comments related to opposition of the proposed project and opposition to the GGNRA Draft Dog Management Plan do not relate to the adequacy or accuracy of the Draft EIR. These comments will be considered by decision makers as part of their decision to approve, modify, or disapprove the proposed project; however, that consideration is carried out independent of the environmental review process.

Currently, dogs are permitted, on leash, at all SFRPD parks, including the Natural Areas. In fact, within the 31 parks that contain Natural Areas within San Francisco and at Sharp Park, there are a total of approximately 2,724 acres of parkland that would be available for on-leash dog use (refer to Table 5 of the Draft EIR), and additional park acreage is available at other parks throughout the city.

In terms of off-leash dog use, the project proposed by the SFRPD—which is evaluated in this EIR—includes the conversion of 19.3 acres of off-leash DPAs within the Natural Areas to on-leash areas (refer to Draft EIR p. 257) in order to maintain and restore native habitats, while protecting areas of high conservation value. Eighty percent of off-leash areas would remain within the Natural Areas, with more on-leash and off-leash areas provided throughout the city, as further described in Response RE-13, RTC p. 4-347, and Response PD-19, RTC p. 4-189. Both of these responses also provide a discussion as to why each of the DPAs would be reduced in size or closed. Response RE-13, RTC p. 4-347, also summarizes the impacts of the reduction in DPAs on other DPAs in terms of recreational capacity, as well as a summary of the project-related and cumulative recreational impacts identified in the Draft EIR. Refer to Response G-25, RTC p. 4-106, for a discussion of the impacts caused by dogs to Natural Areas.

Cumulative impacts due to management of DPAs in City parks are addressed on Draft EIR pp. 261 to 262. The Draft EIR concludes that the potential effect of combined reductions in off-leash areas proposed by the GGNRA and the SFRPD could result in a significant and unavoidable cumulative impact on recreational resources. This determination assumes future implementation of the proposed GGNRA Dog Management Plan.³⁵

To avoid the disturbance of breeding birds at Lake Merced, Management Action LM-7a (on SNRAMP p. 6.1-18) states that the SFRPD and the Dog Advisory Committee should consider relocating the DPA to a different location, and in the meantime, this DPA can remain open, but impacts should be monitored. However, following completion of the final Draft SNRAMP, and during preparation of the Draft EIR, the SFRPD determined that due to ongoing disturbance of breeding birds, this five-acre DPA should be closed rather than monitored (Draft EIR p. 136). Therefore, the text provided in the ninth bullet on Draft EIR p. 136 has been changed as follows:

- LM-7a—Relocate the DPA to a different area to avoid disturbing breeding birds in the current location; (Note: The SFRPD determined following completion of the final draft SNRAMP that, due to ongoing disturbance of breeding birds, this DPA should be closed, rather than monitored. This DPA would be closed in accordance with the SFRPD Final Dog Policy (SFRPD 2002) and SFPUC's Lake Merced Watershed Report (SFPUC 2011). ~~Due to the San Francisco~~

³⁵ The GGNRA Draft Dog Management Plan/Supplemental Environmental Impact Statement (SEIS), which contained six alternatives, was released in September 2013. Subsequently, in February 2016, the Proposed Rule for Dog Management in the GGNRA was released for a 60-day comment period. On February 24, 2016, the Proposed Rule for Dog Management in the GGNRA opened for a 60-day public comment period on www.regulations.gov (RIN 1024-AE16). The comment period was later extended to 90 days and ended on May 25, 2016. All substantive comments on both the SEIS and Proposed Rule will be documented and responded to by NPS in a Final Environmental Impact Statement FEIS. These comments, along with relevant data, expert opinions, and other facts accumulated during the SEIS and Proposed Rule stages, will be evaluated by NPS to determine whether the proposed solution will help accomplish the goals and solve the problems identified in the SEIS before moving forward with a Final Environmental Impact Statement, Record of Decision, and Final Rule. While no specific alternative has been selected, it is reasonable to assume that a reduction in off-leash dog play areas would occur as a result of implementation of one of the Plan's alternatives.

~~moratorium on new DPAs, the Lake Merced DPA couldn't be relocated to a new location, so it would only be removed. Restoration of the site would continue, following removal of the DPA.)~~

At Bernal Hill and McLaren Park, the remaining off-leash portions of the DPA would be limited to flat and less-steep areas. At Bernal Hill, 15 acres of the 21-acre DPA would remain and at McLaren Park 53.4 acres of the 61.7-acre DPA would remain.

Refer also to Response G-1, RTC p. 4-13, which provides dog count data, indicating which DPAs are the most and least used.

Comment G-20	Support for reduced dog play areas as proposed in the SNRAMP
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The response to Comment G-20 addresses all or part of the following individual comments:

Garbutt-1-01	Hasbrouck-1-01	Joyce-1-01
Kathie-1-01	Lock-1-01	Masud-1-01
Radetsky-1-01	Walker-1-01	

- I am writing to show my approval of the proposed reduction of DPAs in city parks. I find myself regularly pestered and often harassed by aggressive dogs. The less I see of them the better. [Garbutt-1-01]
- I strongly urge you to make elimination of off-lease “dog play areas” the preferred alternative or, as the next-best alternative, to reduce the amount of public space dedicated to this use as much as possible. Off-leash dogs pose a danger that (1) deprives other members of the public of use of these areas, and (2) cannot be mitigated by training of dogs or other rules.

San Francisco is one of the densest cities, with the least public space per capita, in the country. Choosing to dedicate space to off-leash dog play, when that denies the use of that space to other would-be users, is an inappropriate use of public land and resources.

The City and County needs to consider the needs of people first, and pets second. There may be fewer play areas for dogs in the city than dog-owners would like, but dogs don't belong in the city, people do, and there are certainly too few outdoor play areas for people!

Please, give me back the opportunity to enjoy Bernal Hill without risk of dog assault by eliminating (or reducing as much as possible) the off-leash dog play areas there and throughout San Francisco. [Hasbrouck-1-01]

- Please consider at least closing the un-fenced dog run areas. Both myself and my dog have been attacked when walking near a dog run area and the owners don't have control over their dogs - or worse, as in my case - the owners don't care if their dog attacks someone. [Joyce-1-01]
- I enthusiastically support limiting access of dogs in Natural Resource Areas so that these areas can be enjoyed by people who do not want dogs and dog mess all over their parks. Thank you. [Kathie-1-01]

- I am sickened by the fact that there are so many people out there who believe that the needs of their pets trump the health, safety and welfare of human beings. In addition to fines, confiscation and euthanasia of offending animals, I believe that the pet owners should undergo psychiatric counseling to straighten out their misconceptions that the welfare of pets takes precedence over that of human beings. POWER TO THE PEOPLE! [Lock-1-01]
- I'd like to express my support for additional restrictions on DPAs and off-leash dog access. [Masud-1-01]
- I used to love walking on Bernal Hill, but I have had too many encounters with aggressive dogs with irresponsible owners, and no longer walk on Bernal Hill. I read on SFGate that the city is considering reducing or eliminating off-leash dog play on Bernal Hill. Please, please take this step. The city needs to consider the needs of people first, and animals second. There may be fewer play areas for dogs in the city than dog-owners would like, but dogs don't belong in the city, people do, and there are certainly too few outdoor play areas for people! [Radetsky-1-01]
- I'd like to add my voice to those of us who feel that dogs are overrunning our public spaces. Everywhere I go there are dogs running around, often off-leash, urinating and defecating everywhere, and the owners frequently don't clean up after them. I can't take my children to the beach because people simply let their dogs run wild. I take them to the park and I'm having to constantly hover over them to make sure they don't fall into a big steaming pile or run afoul of some aggressive off-leash dog.

I want to let my kids run free and play, but I really can't. Instead, they end up in the fenced-in playgrounds while the dogs run free in the tall grass.

Please add my support to the idea of more public spaces that are simply off-limits to dogs, regardless of leash status, and to the idea of stricter enforcement of existing leash laws. [Walker-1-01]

Response G-20

These comments express support for reduced off-leash DPAs as a part of the proposed project evaluated in the Draft EIR and are not comments on the adequacy or accuracy of the Draft EIR.

Comment G-21 No dog group advisory involvement for the Natural Areas Program
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The response to Comment G-21 addresses all or part of the following individual comments:

Emanuel-1-05

Emanuel-2-05

- It is troubling that there appears to be no representation of people with dogs in an advisory capacity for the NAP. There are many dog groups that are qualified and representative of diverse communities and geographies within the city that would serve well, similar to the other partner groups that participate in this city program. [Emanuel-1-05] [Emanuel-2-05]

Response G-21

This comment suggests that there is no representation of people with dogs in an advisory capacity for the NAP.

The comment is not a comment on the adequacy or accuracy of the Draft EIR, but a response has been voluntarily provided. As discussed in Response G-3, RTC p. 4-19, the development of the SNRAMP has occurred over about 10 years, beginning in 1995 and culminating in a 2005 Draft SNRAMP, which was distributed to scientists and regulatory agencies for review and ultimately became the 2006 Final Draft SNRAMP. During development of the 2005 Draft SNRAMP, numerous meetings were held with the Park Recreation and Open Space Advisory Committee (PROSAC), the Recreation & Park Commission, other governmental bodies and organizations, and over 3,000 individuals, including considerable participation from dog owners. In June 2005, when the Draft SNRAMP was released for public review, three well-attended public workshops were held throughout the city, and outreach also included neighborhood groups and residents within 300 feet of all Natural Areas. An online survey was also available for individuals and members of the public who were unable to attend in person. Feedback was received from approximately 2,700 members of the public and recommendations were received from three independent scientists. Further, several task forces, committees, and/or working groups were convened as part of this process, including the Natural Areas Program Citizen Advisory Committee, a separate ad hoc group that made recommendations on how to revise the plan, a Science Round Table group that reviewed the Alternatives Report for Sharp Park, and the Sharp Park Working Group. In addition, revisions to the Sharp Park Restoration Plan were also made in response to input from scientists and regulatory agencies, which resulted in additional restoration areas and, as a result, additional impacts to the golf course. Response G-3, RTC p. 4-19, also describes the independent scientific review that was conducted for the 2005 Draft SNRAMP. Also, the Recreation & Park Commission, which is the policy-making body for all department activities, provides an opportunity for public comment at all hearings. There is not a separate NAP advisory body.

Comment G-22 Recreation and Park Department process for closing dog play areas
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The response to Comment G-22 addresses all or part of the following individual comment:

NPS-1-04

- Pg. 33, 301: It would be helpful to provide further details on what the process would be to document adverse affects in DPA's and what the order of steps would be to address impacts, especially prior to a decision to discontinue a DPA. n. [NPS-1-04]

Response G-22

This comment requests further details on the process to document adverse effects in DPAs and to discontinue a DPA.

The process of identifying conditions that require modification or closure of a DPA would be conducted in accordance with the SFRPD Dog Policy (available at http://sfrecpark.org/wp-content/uploads/Final_Dog_Policy_2002.pdf). Dog Policy Section 6.2 describes how to modify or eliminate a DPA, stating that “If, after evaluation by the Advisory Committee, relevant park groups, and RPD, a DPA is determined to be flawed in nature, potential solutions will be developed and implemented. In essence, if an unfenced DPA fails to confine uses, hard barriers may be implemented. If adequate alternatives cannot be identified, or are deemed ineffective, RPD reserves the right to discontinue the DPA in question.” This process is also identified in Mitigation Measure M-BI-1a of the Draft EIR, which requires evaluation and monitoring of DPAs for adverse effects to biological resources and various actions protect biological resources in accordance with the SFRPD Dog Policy.

The comment seeks additional information and does not raise any specific environmental issues about the adequacy or accuracy of the Draft EIR.

Comment G-23 Prohibition on new dog play areas
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The response to Comment G-23 addresses all or part of the following individual comments:

NPS-1-05

DogPACSF-1-10

SFDOG-2-11

Brown-1-07

- Pg. 105, 110,262: Further explanation is needed as to why no more DPAs may be planned. Since direction on this point dates to 2006, we suggest that this decision be revisited within RPD areas especially given SF concerns regarding impacts on existing SF DPAs due to GGNRA draft dog management plan. Proposed reductions in SF DPAs could increase pressure and impact on remaining dog areas. [NPS-1-05]
- The NAP plan will last for decades, and for the NAP EIR not to consider a major mitigation like opening new DPAs to replace closed ones because of a temporary halt on new designations is absurd. Any analysis of alternatives that does not include this possible mitigation is incorrect and inadequate. [DogPACSF-1-10]
- The NAP plan will last for decades, and for the NAP EIR not to consider a major mitigation like opening new DPAs to replace closed ones is absurd. Any analysis of alternatives that does not include this possible mitigation is inadequate. [SFDOG-2-11] [Brown-1-07]

Response G-23

These comments express concern that the Draft EIR did not consider opening new DPAs to replace closed ones and request a further explanation as to why additional DPAs are not being planned.

The Draft EIR conservatively characterized the direction from the Recreation & Park Commission concerning establishment of new DPAs as a moratorium for the purpose of analyzing cumulative impacts in the Natural Areas. This direction was presented at the October 10, 2006, meeting of the San Francisco Dog Advisory Committee; addressed in a July 19, 2007, SFRPD memorandum on the

Status of the Dog Advisory Committee Work Plan; and discussed during the August 16, 2007, meeting of the San Francisco Recreation & Park Commission. New or improved DPAs may be pursued in San Francisco by the SFRPD and/or through community-driven efforts; however, none are proposed or envisioned in the Natural Areas. In order to make this clear in the Draft EIR, the text provided in the fifth bullet on Draft EIR p. 110 has been changed as follows:

- GR-8b—Match on-leash and off-leash dog use with the sensitivity of the habitat when considering new DPAs within or next to Natural Areas;

(Note: ~~An underlying assumption of this EIR is that there would be no new DPAs because there is~~ The Draft EIR conservatively characterized the direction from the Recreation & Park Commission concerning establishment of new DPAs as not to establish new DPAs until systemwide DPA planning is completed. For the purposes of this EIR, this is considered a moratorium for the purpose of analyzing cumulative impacts in the Natural Areas in that no new DPAs are reasonably foreseeable. This direction was ~~announced~~ presented at the October 10, 2006, meeting of the San Francisco Dog Advisory Committee; addressed in a July 19, 2007, SFRPD memorandum on the Status of the Dog Advisory Committee Work Plan; and discussed during the August 16, 2007, meeting of the San Francisco Recreation & Park Commission. New or improved DPAs may be pursued in San Francisco by the SFRPD and/or through community-driven efforts; however, none are proposed or envisioned in the Natural Areas. ~~Should new DPAs be proposed at some point, the appropriate level of CEQA analysis would be undertaken, and applicable permits and other regulatory agency approvals would be obtained.~~)

A more detailed discussion of the cumulative recreational impacts associated with the closure or reduction in size of DPAs is provided in Response RE-2, RTC p. 4-313.

As part of the CEQA process, each lead agency that seeks to increase or decrease on-leash or off-leash DPAs within the city or its environs would be required to include other nearby projects within their cumulative analysis, as was done for this project in considering the GGNRA Dog Management Plan.

In terms of evaluating an alternative that would allow DPAs in the future, in accordance with CEQA Guidelines Section 15126.6, an EIR need not evaluate every conceivable alternative to a proposed project; rather the EIR alternatives analysis must describe a reasonable range of alternatives that would feasibly obtain most of the basic project objectives and would avoid or substantially lessen the significant environmental impacts of the project. An alternative that assumes additional DPAs, given the fact that no new or improved DPAs are proposed or envisioned in the Natural Areas and the fact that the CEQA objectives do not seek to increase off-leash DPAs, would not be considered within a reasonable range of alternatives; therefore, it was not analyzed in the Draft EIR. In fact, Draft EIR p. 461 states that “[n]o new DPAs would be created under any of the project alternatives ...” However, the Draft EIR identifies four alternatives to the proposed project: the Maximum Restoration Alternative, the Maximum Recreation Alternative, the Maintenance Alternative, and the No Project Alternative (the last of which is required under CEQA Guidelines Section 15126.6). The findings of the alternatives analysis is provided on Draft EIR pp. 461 to 527.

Under the No Project, Maximum Recreation, and Maintenance alternatives, no changes to DPAs would occur. Thus the EIR evaluates a reasonable range of alternatives that would avoid the significant environmental impacts associated with reduction of DPAs as proposed in the SNRAMP.

Refer to Response RE-13, RTC p. 4-347, for a discussion of the reduction of DPAs and the potential impact on recreational capacity.

Comment G-24 Data on disturbance to breeding birds at Lake Merced dog play area

The response to Comment G-24 addresses all or part of the following individual comment:

NPS-1-06

- Lake Merced DPA (pg. 136, 305-306): It would be helpful to our dog management planning for NPS to receive the report of data gathered (# of dogs/incidences of disturbance) on disturbance to breeding birds at Lake Merced DPA that led to the proposal to close this DPA. [NPS-1-06]

Response G-24

This comment requests a report of data on disturbance to breeding birds at the Lake Merced DPA as a result of dogs.

The response below provides the requested data to the extent possible. While data has not been collected on the number of dog incidences and/or disturbances, either at Lake Merced or in other Natural Areas, data has been collected on the number of dogs and owners that visit the Natural Areas (refer to Response G-1, RTC p. 4-13, for that data). In addition, research has been conducted on the impacts of dogs on Natural Areas (refer to Response G-25, RTC p. 4-106).

With respect to Lake Merced, in particular, and based on NAP staff observations, this DPA is home to breeding white-crowned sparrows. As stated on p. 6.1-18 of the SNRAMP, the existing off-leash DPA at the Mesa (MA-1c and MA-2b) is located in a restored dune habitat that supports nesting white-crowned sparrow, which is declining in number in San Francisco, and includes sensitive plant species and some of the only raptor foraging habitat at Lake Merced. The remainder of Lake Merced is an on-leash park and Natural Area. To avoid the disturbance of breeding birds at Lake Merced, Management Action LM-7a (on SNRAMP p. 6.1-18) recommends relocating the DPA to a different area. However, following completion of the final Draft SNRAMP, and during preparation of the Draft EIR, the SFRPD determined that due to ongoing disturbance of breeding birds, this five-acre DPA should be closed rather than relocated (Draft EIR p. 136). Refer to Response G-19, RTC p. 4-88, for a more detailed discussion of the plans for the Lake Merced DPA.

Comment G-25	Analysis of dog impacts related to plants, wildlife, and erosion
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The response to Comment G-25 addresses all or part of the following individual comments:

CFDG-1-01	CFDG-1-02	CFDG-1-03
DogPACSF-1-03	DogPACSF-1-04	GGAS-1-16
SFDOG-1-03	SFDOG-2-03	SFDOG-2-05
Armanini-1-03	Bartley-1-07	Bartolotta-1-01
Bartolotta-1-02	Bartolotta-1-03	Bartolotta-1-04
Bowman-1-07	Bowman-1-08	Brown-1-01
Browne-1-02	Browne-1-03	Buckley-1-02
Butler-1-02	Chambers-1-01	Donovan-1-02
Dougherty-1-01	Emanuel-1-04	Emanuel-2-04
Fitzer-1-03	Form Letter-1-01	Form Letter-1-44
Gachowski-1-02	Garber-1-05	Gavin-1-01
Ghosh-1-02	Hull-1-03	Ingle-1-01
Jake-1-01	Kelly-1-01	King-1-01
Mace-1-01	Mills-1-02	Moyer-1-01
Nelson-1-01	Pittin-1-01	Popoff-1-02
Strasbaugh-1-01	Shepard-J-1-01	Summer-1-01
Winqvist-1-01	Yip-1-01	PH-Stephens-03

- There is no evidence in this EIR to substantiate claims that dogs have an impact on plants or wildlife in natural areas. The EIR must be based on solid, documented impacts, and there is no evidence cited to justify closing or reducing the size of any Dog Play Area (DPA). [CFDG-1-01]
- There are a number of places in this EIR that state that dogs MAY impact plants or wildlife, yet offers no evidence these impacts are actually occurring or have ever occurred. And continues to state: If allowed to be in a natural area, dogs MAY continue to impact plants or wildlife. If there's no proof of an impact, then that impact cannot "continue." The analysis in this EIR based on this speculation is inadequate. [CFDG-1-02]
- In a few places, the NAP EIR says: Observations indicate dogs are impacting erosion, or natural communities, yet it offers no information on these "observations." Who made them? Were they done in a scientifically and objective way? EIRs should be based on solid, scientific data, not on anecdotal "observations." Any conclusions based on this information is again, inadequate. [CFDG-1-03]
- The NAP EIR provides no evidence to prove claims that dogs have an impact on plants and wildlife in natural areas. An EIR should be based on scientific evidence, and there is little presented here. Because the NAP EIR's analysis of impacts from dogs is not based on any evidence, the analysis is inadequate. Without any demonstrated evidence of impacts from dogs, there is no justification for excluding people with off-leash dogs from natural areas. There is, therefore, no justification for the closure of the DPA at Lake Merced, nor for the reductions in the DPAs at McLaren Park and Bernal Hill.

The NAP EIR does not take into account scientific studies that show off-leash dogs have little impact on plants and wildlife, including nesting birds when declaring that dogs have negative impacts. These studies were provided to the Planning Department by SFDOG in its comments on the Initial Study for the NAP EIR. Ignoring them shows that the NAP EIR is inadequate and inaccurate when it comes to dogs and “impacts.” [DogPACSF-1-03]

- The NAP EIR repeatedly says: Dogs MAY be impacting protected plant species or wildlife (pp. 297, 298, 305, 306, 472, 473, 502, 517), yet offers no evidence these impacts are actually occurring or ever have occurred. Unsubstantiated claims cannot be made in an EIR. After each of these examples, the EIR then goes on to say: Dogs MAY continue to impact plants or wildlife. If there’s no proof of an impact, then that impact cannot “continue.” EIRs must be based on observed impacts, not things that “may” happen. The analysis in the EIR based on this speculation is incorrect and inadequate. In several places, the NAP EIR says: Observations indicate dogs are impacting erosion, or plant damage, or damage to natural communities (pp. 471, 500, 505, 516, 519), yet offers no information on these “observations.” Who made them? Were they done in a scientifically rigorous way? Were they made by people biased against dogs? We have seen with the GGNRA’s attempts to get rid of dogs and with Point Reyes attempts to get rid of an oyster farm that reports by “observers” biased against dogs or oyster farmers do not stand up to independent scientific scrutiny. Is this the case here as well? We do not know, since the NAP EIR provides no information about them. Again, EIRs should be based on solid, scientific data, and definitely not on anecdotal “observations.” If not, their analyses cannot be trusted and are inadequate. [DogPACSF-1-04]
- Overall, the DEIR would be improved by a greater discussion of the environmental impacts of dogs on the Natural Areas. Because the stated priorities of the NAP, the protection of biodiversity and other natural values should be prioritized over dog-related recreation and other similar activities. Even where biodiversity is prioritized (in this small amount of San Francisco’s total park acreage), there should be ample opportunities for responsible dog owners and other visitors to full enjoy the Natural Areas. [GGAS-1-16]
- The NAP EIR repeatedly says dogs MAY have an impact, but there is no evidence cited in the EIR that dogs are now or ever have done so. EIR’s must be based on documented impacts, not hypothetical conjectures. Specific proof of impacts, not just claims of “observations” with no details, must be added to the NAP EIR. [SFDOG-1-03]
- The NAP EIR provides no evidence to prove claims that dogs have an impact on plants and wildlife in natural areas. In its comment on the Initial Study, SFDOG noted that there is no scientific consensus that dogs have any impact on plants and wildlife, including nesting birds, in city parks and listed scientific citations for research that showed no impacts from dogs. There is no indication in the NAP EIR that those studies were included, since the NAP EIR accepts the premise, without any evidence to support the premise, that dogs cause impacts. There was no acknowledgment that studies that show otherwise were ever considered in the NAP EIR. In addition, our comment on the Initial Study warned about considering studies that claim impacts from “free-roaming” dogs, since that means dogs that are running without any human control (for example, a dog that accidentally got loose without its owners knowing so there was no human in the park to handle or control the

dog). Off-leash dogs are NOT free-roaming, since they come to parks WITH humans who can control their behavior and activities. There is no indication in the NAP EIR that this warning was heeded, since we don't know what research the EIR used to back its premise that dogs cause impacts. An EIR should be based on scientific evidence, and there is little presented here to justify any claims of impacts. Because the NAP EIR's analysis of impacts from dogs is not based on any evidence, the analysis is incorrect and inadequate.

The NAP EIR repeatedly says: Dogs MAY be impacting protected plant species or wildlife (pp. 297, 298, 305, 306, 472,473, 502, 517), yet offers no evidence these impacts are actually occurring or ever have occurred. Unsubstantiated claims cannot be made in an EIR. After each of these examples, the EIR then goes on to say: Dogs MAY continue to impact plants or wildlife. If there is no proof of an impact, then that impact cannot "continue." EIRs must be based on observed impacts, not things that "may" happen. The analysis in the EIR based on this speculation is incorrect and inadequate.

In several places, the NAP EIR says: Observations indicate dogs are impacting erosion, or plant damage, or damage to natural communities (pp. 471, 500, 505, 516, 519), yet offers no information on these "observations." Who made them? Were they done in a scientifically rigorous way? Were they made by people biased against dogs? [SFDOG-2-03]

- In our comment on the Initial Study, SFDOG pointed out the EIR should re-analyze any data provided by NAP staff, especially data not published in a peer-reviewed journal, to ensure that conclusions against dogs are actually supported by the data. Because no data - only the word "observations" - is included in the NAP EIR, we don't know if there was any analysis of the observations to ensure they say what NAP staff claim they do. This is not just paranoia. In May 2006, Point Reyes National Seashore (PRNS) management claimed that an oyster farm in Drakes Bay was harming marine wildlife and causing significant negative impacts on the environment and, therefore, should be closed. A PRNS report stated that the oyster farm workers disturbed seals, causing a huge decline in seal population, and that sediment from oyster feces was harming eelgrass beds. Therefore, the oyster farm did not belong in a national seashore. Corey Goodman, a microbiologist at UC Berkeley, member of the National Academy of Sciences, and a former Chair of the National Research Council's Board of Life Sciences, analyzed the raw data used in the studies cited by PRNS staff and found that the data did not support nearly every negative impact claimed.

Again, EIRs should be based on solid, scientific data, and definitely not on anecdotal "observations." If an EIR is based on anecdotal evidence, its analysis cannot be trusted and is inadequate. [SFDOG-2-05]

- As with the GGNRA Environmental Impact Statement of 2011, rational for the Significant Natural Resource Areas Management Plan (NAP; [http://sfmea.sfplanning.org/2005.1912E DEIR.pdt](http://sfmea.sfplanning.org/2005.1912E%20DEIR.pdt)) is based largely on allegations, with no substantive scientific studies or third party peer review provided as evidence. Without any demonstrated evidence of impacts from dogs, there is no justification for excluding people with off-leash dogs from natural areas. There is, therefore, no justification for the closure of the DPA at Lake Merced, nor for the reductions in the DPAs at McLaren Park or Bernal Hill. Also, the NAP EIR does not take into

account scientific studies that show off-leash dogs have little impact on plants or wildlife, including nesting birds when declaring that dogs have negative impacts (<http://www.sfdog.org/content/do-dogs-bother-birds>). These studies were provided to the Planning Department by SFDOG in its comments on the Initial Study for the NAP EIR. Ignoring them shows that the NAP EIR is inadequate and inaccurate when it comes to dogs and “impacts.” [Armanini-1-03]

- Dog impacts on the more environmentally sensitive areas such as wetlands and waterways need to be more fully addressed. I am a strong advocate for official dog play areas but these play areas should be situated well away from the most significant natural areas. A clear delineation of all dog play areas needs to be maintained in any case. [Bartley-1-07]
- The NAP EIR provides no evidence to prove claims that dogs have an impact on plants and wildlife in natural areas. An EIR should be based on scientific evidence, and there is little presented here. Because the NAP EIR’s analysis of impacts from dogs is not based on any evidence, the analysis is inadequate. Without any demonstrated evidence of impacts from dogs, there is no justification for excluding people with off-leash dogs from natural areas. There is, therefore, no justification for the closure of the DPA at Lake Merced, no for the reductions in the DPAs at McLaren Park and Bernal Hill. [Bartolotta-1-01]
- The NAP EIR does not take into account scientific studies that show off-leash dogs have little impact on plants and wildlife, including nesting birds when declaring that dogs have negative impacts. These studies were provided to the Planning Department by SFDOG in its comments on the Initial Study for the NAP EIR. Ignoring them shows that the NAP EIR is inadequate and inaccurate when it comes to dogs and impacts. [Bartolotta-1-02]
- The NAP EIR repeatedly says: Dogs MAY be impacting protected plant species or wildlife (pp. 297, 298, 305, 306, 472, 473, 502, 517), yet offers no evidence these impacts are actually occurring or ever have occurred. Unsubstantiated claims cannot be made in an EIR. After each of these examples, the EIR then goes on to say: Dogs MAY continue to impact plants or wildlife. If there’s no proof of an impact, then that impact cannot “continue.” EIRs must be based on observed impacts, not things that “may” happen. The analysis in the EIR based on this speculation is incorrect and inadequate. [Bartolotta-1-03]
- In several places, the NAP EIR says: Observations indicate dogs are impacting erosion, or plant damage, or damage to natural communities (pp. 471, 500, 505, 516, 519), yet offers no information on these “observations.” Who made them? Were they done in a scientifically rigorous way? Were they made by people biased against dogs? We have seen with the GGNRA’s attempts to get rid of dogs and with Point Reyes attempts to get rid of an oyster farm that reports by observers biased against dogs or oyster farmers do not stand up to independent scientific scrutiny. Is this the case here as well? We do not know, since the NAP EIR provides no information about them. Again EIRs should be based on solid, scientific data, and definitely no on anecdotal observations. If not, their analyses cannot be trusted and are inadequate. [Bartolotta-1-04]
- This plan seems to give NAP free-will to exclude people with dogs based on “observations” and “mays” than can be used arbitrarily. For example, the claim is that dogs are causing

erosion at Lake Merced and thus dog play areas should be closed. In truth, dog have almost no impact on Lake Merced because few dogs use the area. The fact that a dog play area is there is almost hidden, and the dog play area signage is non-existent in the park; in fact, all the signs I see around the park indicate dogs on-leash only. While the area isn't currently being used, the NAP will assure that it can never become a dog play area. [Bowman-1-07]

- As another example, the city has attempted to exclude people and dogs from the lagoon at Sharp Park, where people have gone for generations. In Issue SP-8, NAP claims dogs “may” have an impact on the SF Garter Snake and the California Red Legged Frog and that is sufficient to exclude people with dogs. However, there is no concrete evidence that dogs are having any impact on either species or their populations, even at these sites. Collectors seem to be the biggest known impact at the site. [Bowman-1-08]
- The NAP EIR provides no evidence to prove claims that dogs have an impact on plants and wildlife in natural areas. An EIR should be based on scientific evidence, and there is little presented here. Because the NAP EIR’s analysis of impacts from dogs is not based on any evidence, the analysis is inadequate. Without any demonstrated evidence of impacts from dogs, there is no justification for excluding people with off-leash dogs from natural areas. There is, therefore, no justification for the closure of the DPA at Lake Merced, nor for the reductions in the DPAs at McLaren Park and Bernal Hill.

The NAP EIR does not take into account scientific studies that show off-leash dogs have little impact on plants and wildlife, including nesting birds when declaring that dogs have negative impacts. These studies were provided to the Planning Department by SFD OG in its comments on the Initial Study for the NAP EIR. Ignoring them shows that the NAP EIR is inadequate and inaccurate when it comes to dogs and “impacts.”

The NAP EIR repeatedly says: Dogs MAY be impacting protected plant species or wildlife (pp. 297, 298, 305, 306, 472, 473, 502, 517), yet offers no evidence these impacts are actually occurring or ever have occurred. Unsubstantiated claims cannot be made in an EIR. After each of these examples, the EIR then goes on to say: Dogs MAY continue to impact plants or wildlife. If there’s no proof of an impact, then that impact cannot “continue.” EIRs must be based on observed impacts, not things that “may” happen. The analysis in the EIR based on this speculation is incorrect and inadequate.

In several places, the NAP EIR says: Observations indicate dogs are impacting erosion, or plant damage, or damage to natural communities (pp. 471, 500, 505, 516, 519), yet offers no information on these “observations.” Who made them? Were they done in a scientifically rigorous way? Were they made by people biased against dogs?

Again, EIRs should be based on solid, scientific data, and definitely not on anecdotal “observations.” If not, their analyses cannot be trusted and are inadequate. [Brown-1-01]

- For example, I witnessed some of the people “studying impacts by people with dogs.” I even spoke with them. They were not conducting studies based on solid, rigorous science. They weren’t even scientists! Having walked up there for the last 15 years, I could have given you more accurate information, based on long-term observations. For instance, the main culprits

to ground erosion are rainwater, gophers, and certain species of invasive plants. I have watched, over time, the impact these have had on the hill, and it has been significant. Many of the Bernal residents spend time every year pulling these damaging plants. I have pulled entire sections and am happy to have seen no return, even after five years, at no cost to the city! [Browne-1-02]

- When I first started walking on the hill with my dogs, I'd run into the same neighbors at the same hours everyday. Now that more people in the city have discovered the hill, it has become a popular place for many. In fact, many users are refugees from various city parks that only allowed on-leash recreation for their dogs. They were **told** they could find off-leash walking on Bernal Hill. And so they came. And it's a wonderful refuge in this city. As far as the impact of people walking their dogs, the majority stay on the paved road or the designated paths. We don't have a problem of dogs digging that I have seen in other parks. Dogs are having a minimal impact on this area. The new signs that have been placed at the beginning of the park have been helpful in explaining how to use the park in these sustainable ways. Most are willing to comply. In other words, this community has been using this hill in a responsible and sustainable way for many years, with very little intervention. [Browne-1-03]
- The NAP EIR repeatedly says: "dogs MAY be impacting" plants or wildlife, yet offers no evidence that any impacts are actually occurring now or ever have occurred. An EIR must be based on solid scientific evidence. Because the NAP EIR's analysis of impacts from dogs on plants and wildlife is based on unsubstantiated claims, the analysis is inadequate. [Buckley-1-02] [Form Letter-1-01]
- After reviewing the NAP EIR, we find that no evidence is offered that dogs do have a negative impact on the plants and wildlife in the natural areas. Where is the evidence? [Butler-1-02]
- The NAP EIR provides no evidence to prove claims that dogs have an impact on plants or wildlife in natural areas. EIRs must be based on solid, documented impacts, and there is no evidence cited to justify closing or reducing the size of any DPA. The NAP EIR repeatedly says: Dogs MAY impact plants or wildlife, yet offers no evidence these impacts are actually occurring or have ever occurred. Unsubstantiated claims cannot be made in an EIR. The NAP EIR goes on to say: If allowed to be in a natural area, dogs MAY continue to impact plants or wildlife. If there's no proof of an impact, then that impact cannot "continue." Analysis in the EIR based on this speculation is incorrect and inadequate. [Chambers-1-01]
- The EIR is lacking in many respects. It states that dogs "may" be impacting plants and wildlife yet provides no evidence to support this claim, and it fails to mention scientific studies provided to the planning department that show little impacts on plants and wildlife by dogs. The EIR mentions "observations" that indicate the impact of dogs, but nowhere has any data to back up these "observations." Lacking such scientific evidence it is an incomplete EIR. [Donovan-1-02]

- I live and vote in SF, am dog owner, and enjoy the public parks with my dog, neighbors and friends. I am a member of SFDOG. I fully support UC Professor Arthur Shapiro's analysis of the NAP EIR.

In addition, the NAP EIR offers no concrete evidence that dogs negatively impact plants or wildlife. Use of the term "may" in the report reveals the weakness and inadequacy of the report. [Dougherty-1-01]

- Moreover, the SFNAP EIR does not provide scientific evidence that dogs have an impact on plants and wildlife in natural areas. Therefore, it is my belief there is no justification for excluding people with off-leash dogs from natural areas. [Emanuel-1-04] [Emanuel-2-04]
- I understand that the GGNRA has a recreation first mandate with long practiced mixed-use activities (surfing, hiking, dog walking, horseback riding, hang-gliding, kite surfing, jogging, biking, festivals and events)

People, dogs, wildlife and plants successfully co-exist in GGNRA - dogs have little negative impact on natural resources and bird life. [Fitzer-1-03]

- Plants and dogs can co-exist. One of the reasons we chose to purchase a house in SF and create a life here is because it is a very dog friendly city. Losing the spaces will change that for us! [Form Letter-1-44]
- The impact of an off leash animal is no different than that of a wild animal (which we do have even in San Francisco). And how can you really determine that such erosion or impact is due to an off leash animal? And do you really think by restricting off leash dog walking that it will just go away? Have you thought about the impact on the little areas left for people to walk their dog off leash? We will not go away, nor will we stop walking our dogs off leash. By limiting the areas in which we do so only begs for more erosion problems due to the high usage of the limited areas available. [Gachowski-1-02]
- It is true for this EIR, as it was for the GGNRA DEIR that there are very few scientific studies on the effect of dogs on wildlife. Some studies, in fact, show that the presence of dogs increases the presence of wildlife. [Garber-1-05]
- I'm also a dog owner (a reasonably minded one) who enjoys the hill daily. For this reason I've been continually annoyed by the incorrect conclusion by the "Significant Areas" people that dogs are a major factor in the erosion of Bernal Hill. [Gavin-1-01]
- The NAP EIR repeatedly says: "dogs MAY be impacting" plants or wildlife, yet offers no evidence that any impacts are actually occurring now or ever have occurred. An EIR must be based on solid scientific evidence. Because the NAP EIR's analysis of impacts from dogs on plants and wildlife is based on unsubstantiated claims, the analysis is inadequate. [Ghosh-1-02] [Yip-1-01]
- The NAP environmental impact report makes allegations of dog damages with no substantiating scientific study. Are these the same people who freely approve the use of Garlon in areas heavily used by dogs and small children? I feel this shows a disregard for

scientific evidence and study. I feel this shows that this organization is untrustworthy and does not deserve our public support. [Hull-1-03]

- I am a dedicated environmentalist and have been a member of Nature Conservancy, Greenpeace, Wilderness Society, and other environmental organizations for many years. Yet I see no reason to ban off leash dog walking in the dog play areas at Lake Merced, McLaren Park, Bernal Hill areas. In the years I have been enjoying these areas with my dogs, I have never seen any problems caused by dogs.

The NAP EIR repeatedly says: Dogs MAY be impacting protected plant species or wildlife (pp. 297, 298, 305, 306, 472, 473, 502, 517), yet offers no evidence these impacts are actually occurring or ever have occurred. Unsubstantiated claims cannot be made in an EIR. After each of these examples, the EIR then goes on to say: Dogs MAY continue to impact plants or wildlife. If there's no proof of an impact, then that impact cannot "continue." EIRs must be based on observed impacts, not things that "may" happen. The analysis in the EIR based on this speculation is incorrect and inadequate. To deny many people the joy of walking their dogs off leash because of unsubstantiated data is poor administration to say the least. [Ingle-1-01]

- The NARMP EIR doesn't offer evidence to support its claims that dogs have an impact on plants and wildlife in natural areas. The NARMP EIR doesn't take into account scientific studies that show off leash dogs have little impact on plants and wildlife, including nesting birds when declaring that dogs have negative impacts. The NARMP EIR states that dogs MAY be impacting protected plant species or wildlife, but offers no scientific evidence these possible impacts are actually occurring or ever have occurred. In a number of places, the NARMP EIR says that someone's observation is that dogs impact erosion, or cause plant damage, etc., yet the EIR offers no supporting information on these "observations." EIRs should obviously be based on solid, scientific data, not on someone's anecdotal "observations." Further, if there are negative impacts by usage, the NARMP EIR does not differentiate between impacts caused by people with dogs and impacts caused by people without dogs. [Jake-1-01]
- The NAP EIR repeatedly says: Dogs MAY impact plants or wildlife, yet offers no evidence these impacts are actually occurring or have ever occurred. Unsubstantiated claims cannot be made in an EIR. The NAP EIR goes on to say: If allowed to be in a natural area, dogs MAY continue to impact plants or wildlife. If there's no proof of an impact, then that impact cannot "continue." Analysis in the EIR based on this speculation is incorrect and inadequate. [Kelly-1-01]
- I am writing to offer my brief comments on the changes being proposed by the recent NAP EIR as the relate to Dog Play Areas. I have lived directly across the street from McLaren park for over 6 years, and have walked my dog in that DPA nearly daily for that period. I have seen absolutely no visible deterioration of the natural resources of McLaren. (And in fact, the park has bece ome safer over the years due to the presence of so many dogs and their walkers & owners.)

The changes proposed appear to have been made based on a series of assumptions of how dogs MAY be impacting natural areas, but the "data" provided is spotty, inconclusive, and in some portions of the report, flat-out incorrect. The lack of scientific method or quantifiable results is disturbing, and certainly shouldn't provide a basis for making such sweeping changes that will negatively impact so many citizens.

McLaren Park in particular remains one of only places in the city where dogs and their owners can exercise together over great distances, while co-existing peacefully with the natural inhabitants of the park, as well as other human users. I urge you to reconsider the proposed changes being made, and allow our already limited DPAs to remain as they are. [King-1-01]

- It seems, however, that City officials have decided that dogs destroy native plants around here. I walk my dog everyday around these parks, and I am here to tell you that that is simply not true. Responsible dog owners (and we are the majority of dog owners) don't let there animals off trails, or on native grasses or other plants. Just because you love your dog does not make you an enemy to the environment. It is also my observation that irresponsible dog owners are irresponsible people in general. They are irresponsible parents, and citizens. These people let their children, and their own actions do way more damage to the environment than any dog could do. Are you also going to ban children form the parks because they cause environmental damage? [Mace-1-01]
- The EIR's arguments to remove off leash dog areas are not solid and ignore the actual usage of these areas by the city's inhabitants. The EIR's analysis is incomplete and bases many arguments on "potential" negative impacts not on actuality. Who is present in the parks in sunshine and inclement weather 365 days a year? People with dogs are. [Mills-1-02]
- I am a SF resident, and I have two small dogs, which were both rescued from shelters. I walk daily with my two dogs on Bernal Hill, after I finish work. My dogs are well behaved, under voice command, and I pick up after my dogs. In addition to this being my main form of exercise, there is also a social aspect to walking on the hill, and I have made many wonderful friends and acquaintances by walking my dogs. I adamantly oppose any change in the off-leash area in this park for the following reasons:
 - 1) The NAP EIR repeatedly says: "dogs MAY be impacting" plants or wildlife, yet offers no evidence that any impacts are actually occurring now or ever have occurred. An EIR must be based on solid scientific evidence. Because the NAP EIR's analysis of impacts from dogs on plants and wildlife is based on unsubstantiated claims, the analysis is inadequate. [Moyer-1-01]
- I am writing in regard to the NAP EIR and the potential impact on offleash dog areas. I am a dog owner, live and vote in San Francisco, and enjoy the public parks with my dog, neighbors and friends.

I am a member of SFDOG. I fully support UC Professor Arthur Shapiro's analysis of the NAP EIR. In addition, the NAP EIR offers no concrete evidence that dogs negatively impact plants

or wildlife. Use of the term "may" in the report reveals the weakness and inadequacy of the report. [Nelson-1-01]

- Thank you for the opportunity to comment on the Natural Areas Program EIR.

Errors and assumptions in the EIR demonstrate that there is a basic lack of research underlying this EIR, and this is not a basis for going forward with the plan.

For example, assumptions are made regarding the impact of dogs, whereby it is stated that "Dogs may be impacting plants or wildlife," while there is no evidence given or reference made to any studies which state that such impacts *are* being made or felt. These hypotheticals are then used as fact, and the EIR then seeks to remove dogs' *continuing* impact, while the initial impact has never been demonstrated or justified by statistical, scientific, or other reasonable basis. The City cannot truncate a primary form of recreation, walking in our local parks and open spaces with our off-leash dogs, on the basis of hypotheticals and unproven assumptions.

Dogs are generally regarded as nuisances in this EIR, and I find this position to be a very big problem indeed. The parks and the Dog Play Areas already created were established based on proven need. Indeed, there were to be more DPAs created after Rec and Park studied the issue, following the sunset of the Dog Advisory Committee (DAC). Rec and Park has never made this study, and has never come out with a plan for more off-leash areas. The NAP EIR seems to have been written in a vacuum, without consideration of the recreational requirements being met by already established DPAs, or the need for more space for off-leash and other forms of recreation. San Franciscans need more space for recreation, not less. [Pittin-1-01]

- The NAP EIR does not show evidence proving that dogs have an adverse impact on wildlife in natural areas, nor does it take into account studies that show dogs have little or no impact on plants and wildlife. [Popoff-1-02]
- There are so many things wrong with the NAP EIR that one hardly knows where to begin. Let's start with the lack of scientific evidence, just some unknown person(s) observations. The fact that the EIR repeatedly says that dogs "MAY" harm native plant gardens without proof or evidence of any kind is an excellent start. Well, they "MAY" be beneficial too.

I urge you to reject this EIR and send them back to the drawing board to incorporate scientific evidence and to evaluate the impact to other parks when they close all these dog play areas, not just to people with dogs but all people. [Shepard-J-1-01]

- I am a District 9 homeowner residing at 286 Hamilton St., San Francisco. I am also an 11 year dog volunteer with the San Francisco SPCA. I am outraged that you would consider the huge cuts you proposing for dog play areas in San Francisco. First of all, a reminder: a draft environmental-impact statement by the Golden Gate National Recreation Area has already shown no direct link between dog walking and any environmental damage in GGNRA lands. Second, what do you think is going to happen when you cut these DPAs? There will be more pressure on the surviving DPAs because more dogs will be visiting fewer areas. Is

that your ultimate goal? To force dog owners and walkers out of parks altogether? Or, as you put it - is THIS the “environmental superior alternative”? [Strasbaugh-1-01]

- This email is in response to the NAP EIR, which is an inadequate plan that requires additional work. Buena Vista is my neighborhood park, which I have been walking in for the past 8 years with my dog. The NAP EIR will restrict my and my neighbor's access to this park, as well as a number of others.

It's important that the EIR be based on solid scientific evidence, which is not the case here. The NAP EIR asserts a number of times that dogs may be impacting plants or wildlife but does not offering any evidence, past or present, while ignoring scientific studies that show the contrary. Ignoring scientific studies that do not agree with the plan while not providing any evidence of its own is not acceptable. [Summer-1-01]

- I am writing to comment on the NAP EIR. While I recognize the importance of native plants to the Bay Area, the NAP EIR is inadequate and additional work must be done. I frequently walk in Buena Vista and Bernal Hill parks with my dog, both of which I've visited for the past 8 years, and this plan will adversely affect the public's access to those areas, among many others.

An EIR needs to be based on solid scientific evidence. However, the NAP EIR repeatedly states that dogs may be impacting plants or wildlife without offering evidence of any impacts, past or present. It also ignores scientific studies that show off leash dogs to have little impact on plants and wildlife. [Winquist-1-01]

- The NAP EIR reportedly – repeatedly says dogs may have an impact, but there's no evidence cited in the EIR that dogs are now or ever have done so. EIRs must be based on documented impacts, not hypothetical conjectures. Specific proof of impacts, not just claims of observations with no details given, must be added to the EIR. [PH-Stephens-03]

Response G-25

These comments question whether dogs could impact plants or wildlife and request scientific evidence.

The purpose of the EIR is to analyze the impacts of the proposed project, including the SNRAMP's proposal to reduce and close DPAs, converting them from off-leash to on-leash areas. The DPA modifications identified as part of the proposed project and evaluated in the Draft EIR are those known and anticipated at the time of document production. The project would close the Lake Merced DPA and reduce the acreage of the Bernal Hill and McLaren Park DPAs. No other direct or indirect DPA modifications are foreseen as a result of SNRAMP implementation, beyond what was disclosed and analyzed in the Draft EIR. Refer also to Response RE-3, RTC p. 4-319, and Response RE-13, RTC p. 4-347, for a discussion of the cumulative impacts of the reduction in DPAs within the SFRPD property and the GGNRA. The need for and scope of those DPA modifications were made independently by SFRPD and are not a result of this EIR analysis.

The purpose of an EIR is to disclose the environmental consequences of the project as described by the project proponent. As such, it is beyond the scope of the Draft EIR to justify or document the validity of the proposed management objectives and actions concerning off-leash dog use. As required by CEQA, the EIR analyzes the potential environmental impacts of closing and/or reducing DPAs in Impact RE-1, Draft EIR pp. 257 and 258, and concludes that because the Lake Merced DPA is not heavily used and the Bernal Hill and McLaren Park DPA reductions represent a small portion of otherwise large DPAs, the potential increase in users of other DPAs would not be substantial enough to result in the physical deterioration of recreational facilities. This impact was determined to be less than significant. The EIR concludes, however, that an increase in dog use could result in significant impacts to biological resources, specifically protected plants and special-status bird species (Impact BI-1 and Impact BI-2 on pp. 298 and 305 to 306, respectively). The EIR identifies Mitigation Measure M-BI-1a, Protection of Protected Species and Riparian and Wetland Habitat, Draft EIR p. 298, which calls for the SFRPD to continue to evaluate the impacts of DPAs and, where substantial adverse impacts to special-status species are confirmed, SFRPD shall take actions to protect those species. The mitigation measure specifically allows for DPAs within the Natural Areas to continue to be evaluated in accordance with the SFRPD's Dog Policy and be monitored for adverse effects to biological resources. If substantial adverse impacts to protected species are confirmed, the SFRPD shall take actions to protect those species, which may include installing signs, fencing, or protections including, but not limited to, decommissioning DPAs, in accordance with the SFRPD Dog Policy.

The conversion of the DPA at Lake Merced (to on-leash dog areas) is proposed to protect sensitive dune scrub habitat, special-status species, and breeding white-crowned sparrows within the DPA. The reduction in size of the DPAs at McLaren Park and Bernal Hill would be located in areas that contain sensitive wildlife and habitat and are also characterized by steep slopes, not conducive to dog use. The remaining 75.9 acres of off-leash DPAs are less vulnerable to erosion and other impacts from off-leash dog use. In total, the project would convert approximately 20 percent of the existing DPAs within the Natural Areas to on-leash dog areas, leaving 80 percent available for off-leash dog use.

Adverse impacts resulting from dog use is widely accepted by natural resource management professionals, and it is well supported in the scientific literature that dogs, particularly off-leash, can adversely affect wildlife and sensitive habitats. The SFRPD has documented the impacts of dog use in Natural Areas, which includes digging, soil disruption, weed growth, trampling, soil exposure, and plant loss.³⁶ Further, an article titled "Four-legged Friend or Foe? Dog Walking Displaces Native

³⁶ Lisa Wayne, San Francisco Recreation and Park Department, "Observations of Impacts of Dog Use in Natural Areas," memorandum to Lisa Beyer, Karen Mauney-Brodeck, and Jessica Range, March 12, 2012.

Birds from Natural Areas”³⁷ concluded that dog walking in woodland areas leads to a 35 percent reduction in bird diversity and a 41 percent reduction in abundance, both in areas where dog walking is common and where dogs are prohibited. In addition, BioOne, a nonprofit online aggregation of core research in the biological, ecological, and environmental sciences, published an article titled “The Effects of Dogs on Wildlife Communities,”³⁸ concluding that “regulating the activity of dogs in Natural Areas may be of particular importance when conservation goals include the management of species that may perceive dogs as predators.”

In the Purpose and Need section of the Golden Gate National Recreation Area Draft Dog Management Plan/Supplemental Environmental Impact Statement,³⁹ in a sub-section titled “Dogs and Natural Resources” (pp. 32 to 34), the NPS provides a summary of the literature review that was conducted to determine the potential for adverse impacts from dogs or dog use on wildlife, wildlife diseases, and vegetation (including soils). In summary, the NPS determined that dogs can disturb wildlife species, with birds exhibiting a higher sensitivity than other species, and can also damage plant communities. This information was used to develop the NPS’s proposed dog management regulations.

Based on the evidence provided in this response, supported by other technical studies evaluating the impacts of dogs on Natural Areas and parks in other cities and counties for the purposes of controlling unrestricted dog use, the proposed management actions to reduce off-leash dog use in certain areas that support sensitive species and habitats would likely have a beneficial effect on biological resources.⁴⁰ The Draft EIR concluded that other management actions, including the removal of invasive trees and vegetation, along with the habitat improvements, would similarly result in a beneficial impact on plants and wildlife, including aquatic species (Draft EIR pp. 296, 304, 307, 311, 312, 321, 323, 325, 329, 331, 333, 336, 338, 341, 343, and 346). In addition, Impact BI-1, on Draft EIR p. 298, states that dogs may currently be impacting and may continue to impact protected

³⁷ Peter B. Banks and Jessica V. Bryant, Four-legged Friend or Foe? Dog Walking Displaces Native Birds From Natural Areas, *Biology Letters* 3, 611–613, 2007.

³⁸ Benjamin E. Lenth, Richard L. Knight, and Mark E Brennan, The Effects of Dogs on Wildlife Communities, *Natural Areas Journal* 28:218–227, 2008.

³⁹ National Park Service, U.S. Department of the Interior, *Golden Gate National Recreation Area Draft Dog Management Plan/Supplemental Environmental Impact Statement*, Fall 2013. This document is available online at: <http://parkplanning.nps.gov/document.cfm?parkID=303&projectID=11759&documentID=55416>, accessed June 7, 2016.

⁴⁰ Policies for keeping dogs on-leash occur in other parks to protect wildlife. For example, the Portland Parks and Recreation Department has issued Policy 3.07 (Dogs in Natural Area Parks Policy), which states that dogs are not permitted off-leash in Natural Area parks. The policy goes on to state that “[m]any studies have documented the effects of domestic dogs on wildlife. As dogs are recognized as predators by wildlife, their presence may stress wildlife and reduce breeding success. Visiting dogs can transmit diseases to wild populations or pick up diseases carried by wildlife. Uncollected dog feces can result in fertilization which may favor invasive plant species. Dogs can also contribute to the spread of undesirable species through seeds in their fur.”

plant species in or near DPAs, and Impact BI-2, on Draft EIR p. 306, similarly says that dogs may currently be impacting and may continue to impact protected or nesting birds within the DPA (referring to the Lake Merced DPA).

It is the intent of the SNRAMP to provide distance between the DPAs and sensitive plants, habitats, or wildlife in order to maintain or improve these sensitive plant and wildlife areas.

Regarding the comment that the intensity of use and the erosion potential may increase in areas that continue to allow off-leash use as a result of closing/reducing DPAs, this effect is addressed under Impact RE-7, the text of which has been clarified and expanded in Response RE-2, RTC p. 4-313. Impact RE-7 concludes that the proposed DPA closures under the SNRAMP in combination with the future implementation of the proposed GGNRA Dog Management Plan could accelerate the physical deterioration of the remaining DPAs, resulting in a potentially significant cumulative impact. The EIR adequately identified this as a significant cumulative impact, as further discussed in Response RE-2, RTC p. 4-313. Other impacts related to dog use are addressed throughout this RTC document, including, but not limited to, Response BI-9, Contamination from dog urine, RTC p. 4-383; Response G-24, Data on disturbance to breeding birds at Lake Merced dog play area, RTC p. 4-95; Response G-26, Social impacts of dog ownership and reduce dog play areas, RTC p. 4-114; and Response RE-13, Effect of the reduction of DPAs on other DPAs in terms of recreational capacity, RTC p. 4-347.

Comment G-26	Social impacts of dog ownership and dog play access restrictions
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The response to Comment G-26 addresses all or part of the following individual comments:

CFDG-1-10	CFDG-1-12	DogPACSF-1-14
DogPACSF-1-17	SFDOG-1-04	SFDOG-2-14
SFDOG-2-16	SFDOG-2-17	Bartolotta-1-13
Bartolotta-1-15	Brown-1-11	Brown-1-13
Brown-1-14	Browne-1-01	Buckley-1-01
Dougherty-1-02	Dougherty-1-04	Enzi-1-02
Fitzer-1-06	Form Letter-1-03	Ghosh-1-04
Jake-1-03	Jake-1-05	Kelly-1-05
Moyer-1-03	Nelson-1-02	Nelson-1-04
Yip-1-03	PH-Stephens-04	PH-Stephens-05

- The EIR refers to dogs as “nuisances.” It does not consider the positive aspects of dog walking, including the physical and mental health benefits to people who walk with their dogs. These must be included in the analysis of different alternatives. People walk in McLaren Park and on Bernal Hill because they are large enough to take long walks with your dog. Most other DPAs are much smaller and do not offer the same walking experience. This EIR assumes all DPAs are interchangeable. They are not. This must be corrected. [CFDG-1-10]

- This EIR does not consider any impacts on the social community of people who walk with dogs in areas NAP wants to close. This is especially important if 80% of off-leash space is closed. These are significant impacts and must be evaluated and considered. [CFDG-1-12]
- The NAP EIR refers to dogs as “nuisances.” The EIR does not consider any positive aspects of dog walking, including the physical and mental health benefits to people who walk with their dogs. This lack is especially noticeable in sections dealing with impacts on recreation of the various alternatives considered. The reason so many people walk their dogs off-leash in Bernal Hill and McLaren Park is that those areas are large enough that people can hike long distances with their dogs off-leash. The majority of DPAs in city parks are too small for similar hikes. You can play fetch with a dog in these smaller DPAs, but not take a long walk. You cannot have the same recreational experience in a small DPA that you can have in a larger one; DPAs are not interchangeable. This difference in DPAs creates a significant impact on the recreational experience for dog walkers if the DPAs in Bernal Hill or McLaren Park are closed. In addition, there would be a significant negative impact on the physical and mental health of dog walkers if 80% of off-leash space were closed because NAP claims impacts from dogs. This is not considered in the NAP EIR, which is inadequate without it. These negative impacts on the physical and mental health of dog walkers of the 80% closure will be amplified considerably when combined with closures of off-leash in the GGNRA. This must be considered in the cumulative impacts sections. [DogPACSF-1-14] [SFDOG-2-14] [Brown-1-11]
- The NAP EIR does not adequately consider the impacts on the social fabric of San Francisco if one-quarter of its city parklands are closed to residents. Natural areas are not generally accessible to people, whether they have a dog or not. The NAP plan calls for the closure of many trails and reduction of recreational access. You cannot play catch with your child, have a picnic lunch, or play with a dog in a natural area. It can only be a plant museum. The EIR does not adequately consider the significant impact on families and the sense of shared community that access to parks fosters in our urban setting. [DogPACSF-1-17]
- As such, the EIR must consider the impact of those closures on the human and urban environments, not just the natural environment. Throughout the EIR, dogs are described solely as “nuisances.” The EIR does not consider any benefits of dogs and off-leash dog walking to people and communities. The NAP EIR must consider impacts on the physical and emotional health of people who can no longer walk their dogs in closed DPAs, and on the sense of neighborhood and park community that will be impacted if DPAs are closed or significantly reduced. Yet it does not. [SFDOG-1-04]
- The NAP EIR states that impacts to land use planning can be considered significant if they have a “substantial impact on the existing character of the vicinity.” (p. 176) In all of its analysis of impacts on the existing character of the vicinity, the NAP EIR never considers the impact on the social community of people who walk with their dogs in the portions of DPAs that NAP wants to close. This community, in many cases, defines the “existing character” of the park. Dog walkers are perhaps the most common and most diverse group of park users. If you watch dog walkers in SF city parks, you will see kids and seniors, people with disabilities, gay and straight, every ethnic and religious group, and every socioeconomic

class walking, talking and laughing together, all united by their common love of dogs. There are few places in San Francisco where you will see so many different types of people interacting without rancor. People who walk in the same park at the same time every day know their fellow dog walkers. These friendships extend outside the park into the neighborhoods, helping create the sense of belonging to a community that is so important in today's impersonal urban society. Closures and reductions in DPAs (especially if 80% of the total off-leash space in city parks is closed) will have a significant negative impact on these social communities. DPA closures will destroy these communities. Because the NAP EIR did not consider these impacts on community of those who live near and walk in parks, it is inadequate. [SFDOG-2-16]

- The EIR does not adequately consider the significant impact on families and the sense of shared community that access to parks fosters in our urban setting. [SFDOG-2-17] [Brown-1-14]
- The NAP EIR refers to dogs as “nuisances.” The EIR does not consider any positive aspects of dog walking, including the physical and mental health benefits to people who walk with their dogs. This lack is especially noticeable in sections dealing with impacts on recreation of the various alternatives considered. The reason so many people walk their dogs off-leash in Bernal Hill and McLaren Park is that those areas are large enough that people can hike long distances with their dogs off-leash. The majority of DPAs in city parks are too small for similar hikes. You can play fetch with a dog in these smaller DPAs, but not take a long walk. You cannot have the same recreational experience in a small DPA that you can have in a larger one; DPAs are not interchangeable. This difference in DPAs creates a significant impact on the recreational experience for dog walkers if the DPAs in Bernal Hill or McLaren Park are closed. In addition, there would be a significant negative impact on the physical and mental health of dog walkers if 80% of off-leash space were closed because NAP claims impacts from dogs. This is not considered in the NAP EIR, which is inadequate without it. These negative impacts on the physical and mental health of dog walkers of the 80% closure will be amplified considerably when combined with closures of off-leash in the GGNRA. This must be considered in the cumulative impacts sections. [Bartolotta-1-13]
- The NAP EIR states that impacts to land use planning can be considered significant if they have a “substantial impact on the existing character of the vicinity.” (p. 176) In all of its analysis of impacts on the existing character of the vicinity, the NAP EIR never considers the impact on the social community of people who walk with their dogs in the DPAs and portions of DPAs that NAP wants to close. This community, in many cases, defines the “existing character” of the park. Dog walkers are perhaps the most diverse group of park users. If you watch dog walkers in SF city parks, you will see kids and seniors, people with disabilities, gay and straight, every ethnic and religious group, and every socioeconomic class walking, talking and laughing together, all united by their common love of dogs. There are few places in San Francisco where you will see so many different types of people interacting without rancor. People who walk in the same park at the same time every day know their fellow dog walkers. These friendships extend outside the park into the neighborhoods, helping create the sense of belonging to a community that is so important in

today's impersonal urban society. Closures and reductions in DPAs (especially if 80% of the total off-leash space in city parks is closed) will have a significant negative impact on these social communities. DPA closures will destroy these communities. Because the NAP EIR did not consider these impacts on community of those who live near and walk in parks, it is inadequate. [Bartolotta-1-15] [Jake-1-05]

- The NAP EIR states that impacts to land use planning can be considered significant if they have a "substantial impact on the existing character of the vicinity." (p. 176) In all of its analysis of impacts on the existing character of the vicinity, the NAP EIR never considers the impact on the social community of people who walk with their dogs in the portions of DPAs that NAP wants to close. This community, in many cases, defines the "existing character" of the park.

Closures and reductions in DPAs (especially if 80% of the total off-leash space in city parks are closed) will have a significant negative impact on these social communities. DPA closures will destroy these communities. Because the NAP EIR did not consider these impacts on community of those who live near and walk in parks, it is inadequate. [Brown-1-13]

- My family and I have been walking our dogs on Bernal Hill for as long as we've lived here. The proposals in the NAP EIR would drastically impact our use and enjoyment of this area. I have read the NAP EIR and believe it's assessments and suggestions are faulty, to say the least. [Browne-1-01]
- The NAP EIR defines dogs as "nuisances." The EIR does not consider the impacts of DPA closures (especially the 80% potential closures) on the physical and mental health benefits of people who walk with their dogs. The EIR does not consider the impacts of DPA closures (especially the 80% potential closures) on the social community of dog walkers in parks and in the neighboring communities surrounding the parks. [Buckley-1-01] [Ghosh-1-04]
- The NAP EIR's analysis of the impact on dog play areas is inadequate. The NAP EIR's definition of dogs as a "nuisance" discloses its bias against dogs and ignores the scientifically proven benefits that dogs bring to society and nature as an integral part of the environment. Dogs serve humans and nature in numerous, beneficial ways. [Dougherty-1-02]
- Finally, the NAP EIR would have a negative impact on San Francisco's economy with the loss of jobs (e.g., professional dog walkers), more dogs being surrendered to the city shelter for lack of adequate venues for off-leash exercise, and loss of international status as a dog friendly tourist destination. [Dougherty-1-04]
- Please know that many of us do not see any value in these type of programs. Unless we are all going away and taking our cars and two centuries of urban planning with us, it seems more sensible for the parks to be maintained for the use and enjoyment of ALL of the people who pay for their upkeep and maintenance. This includes children, runners, classes, sportspeople, dogs and their people, sunbathers, gardeners and bicyclists.

NAP is an attempt to undermine this great and successful social experiment by useless prohibitions on the citizens' enjoyment of what they have paid for. The benefits of this program are ill considered. Please do not continue down this garden path. [Enzi-1-02]

- More and more I have been reading articles in various national newspapers about the important role animals, and dogs, in particular, play in the lives of people. This is certainly true for our dog and I suspect for all dog owners. [Fitzer-1-06]
- The NARMP EIR refers to dogs as “nuisances,” an extremely biased position that fails to consider any positive aspects of dog walking, including the physical and mental health benefits to having a dog, which has been rigorously studied and proven. [Jake-1-03]
- The NAP EIR refers to dogs as “nuisances.” It does not consider the positive aspects of dog walking, including the physical and mental health benefits to people who walk with their dogs. These must be included in the analysis of different alternatives. People walk in McLaren Park and on Bernal Hill because they are large enough to take long walks with your dog. Most other DPAs are much smaller and do not offer the same walking experience. The NAP EIR assumes all DPAs are interchangeable. They are not. This must be corrected. [Kelly-1-05]
- 3) The NAP EIR defines dogs as “nuisances.” The EIR does not consider the impacts of DPA closures (especially the 80% potential closures) on the physical and mental health benefits of people who walk with their dogs. The EIR does not consider the impacts of DPA closures (especially the 80% potential closures) on the social community of dog walkers in parks and in the neighboring communities surrounding the parks. [Moyer-1-03]
- The NAP EIR's analysis of the impact on dog play areas is inadequate. The NAP EIR's definition of dogs as a "nuisance" discloses its bias against dogs and ignores the scientifically proven benefits that dogs bring to society and nature as an integral part of the environment. Dogs serve humans and nature in numerous, beneficial ways. [Nelson-1-02]
- Finally, the NAP EIR would have a negative impact on San Francisco's economy with the loss of jobs (e.g., professional dog walkers), more dogs being surrendered to the city shelter for lack of adequate venues for offleash exercise, and loss of international status as a dog friendly tourist destination. [Nelson-1-04]
- I think the NAP EIR is inadequate and that additional work must be done:

The NAP EIR defines dogs as “nuisances.” The EIR does not consider the impacts of DPA closures (especially the 80% potential closures) on the physical and mental health benefits of people who walk with their dogs. The EIR does not consider the impacts of DPA closures (especially the 80% potential closures) on the social community of dog walkers in parks and in the neighboring communities surrounding the parks. [Form Letter-1-03] [Yip-1-03]
- Give us unbiased proven factors or don't kick us out. NAP has become a way to get rid of DPA's and city parks since the only real remedy from the alleged impacts from dogs is closure of the DPA. As such, the EIR must consider the impact of those closures on the human and urban environments, not the just the natural environment. [PH-Stephens-04]
- Throughout the EIR, dogs are described solely as nuisances. The EIR does not consider any benefits of dogs and off-leash dog walking to people and communities. The NAP EIR must consider impacts of a physical and emotional health of people who can no longer walk their

dogs in closed DPAs, and on the sense of neighborhood and park community that will be impacted if DPAs are closed or significantly reduced. Yet it does not. [PH-Stephens-05]

Response G-26

These comments express concern that the Draft EIR needs to analyze a variety of social and/or economic impacts related to the conversion of off-leash DPAs to on-leash areas and that the Draft EIR's language exhibits a bias against dogs and DPAs.

As defined under CEQA Guidelines Section 15382, "significant effect on the environment" means a substantial or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. Consistent with CEQA Guidelines Section 15064(e), an economic or social change, such as the physical and mental health effects of people who walk their dogs, the benefits that dogs bring to society, the potential loss of dog-walking jobs, or impacts associated with dogs being surrendered to a dog shelter, by itself shall not be considered a significant effect on the environment. However, where a physical change in the environment is caused by an economic or social impact of a project, that physical change may be regarded as a significant impact on the environment in the same manner as any other physical change caused by the project. The social effects described in the comments above would not result in a substantial or potentially substantial adverse change to the physical environment.

In addition, economic and social effects of a physical change may be used to determine that the physical change is a significant effect on the environment. If the physical change causes adverse economic or social effects on people, those adverse effects may be used as a factor in determining whether they physical change is significant. For example, if a project would cause overcrowding of a public facility and the overcrowding causes an adverse effect on people, the overcrowding would be regarded as a significant effect. In this case, the analogous example would be if the proposed actions in the SNRAMP, including the reduction and closure of DPAs, would cause the overcrowding of other DPAs, leading to an adverse effect on people, the overcrowding of other DPAs could be regarded as a significant effect. As indicated in Response RE-13, p. 4-347, it is unlikely that DPAs within and outside of the Natural Areas would experience increased use to the point of physical deterioration or accelerated deterioration from the loss of 19.3 acres distributed among three DPAs; the remaining six DPAs (Bernal Hill, Buena Vista Park, Corona Heights, Golden Gate Park Oak Woodlands, McLaren Park, and Pine Lake) would have 75.9 acres available for off-leash use. Further, within the 31 parks that contain Natural Areas within San Francisco and at Sharp Park, there are a total of approximately 2,724 acres of parkland and additional park acreage is available at other parks throughout the city for on-leash dog use. Therefore, there is opportunity for both off-leash and on-leash dog use within the Natural Areas and other city parks, and no overcrowding of DPAs as a result of this change is anticipated.

Comments about the relative merits of the proposed project will be considered by decision makers as part of their decision to approve, modify, or disapprove the proposed project. That consideration is carried out independent of the environmental review process.

One of the commenters states that impacts to land use planning can be considered significant if they have a “substantial impact on the existing character of the vicinity.” For purposes of environmental impact analysis under CEQA, the term “existing character” is taken to mean the character of the physical and land use features within the area affected by a proposed project. The Draft EIR concludes that because the proposed actions in the SNRAMP would not result in changes in land use, there would be no substantial impact on the existing character of the Natural Areas (Draft EIR p. 181).

In addition, the comment that the SNRAMP proposes to close 80 percent of the off-leash dog space in City parks is incorrect. The SNRAMP proposes to close one DPA (the Lake Merced DPA, approximately five acres) and reduce the DPA acreage in two other Natural Areas (Bernal Hill and McLaren Park) for a total conversion of 19.3 acres of DPAs to on-leash dog areas. Approximately 75.9 acres of off-leash play areas would remain (or 80 percent) and, in all parks under SFRPD control, dogs are welcome on leash; therefore, the proposed project is not expected to negatively impact the health and welfare of dogs, dog owners, dog walkers, or cause dogs to be surrendered to a dog shelter. Also, with respect to the loss of dog-walking jobs or dogs being surrendered to a dog shelter, the commenter did not provide substantial evidence to support this assertion.

As discussed on Draft EIR p. 257, the DPA at Lake Merced is not heavily used and the reduction of off-leash areas on the steep portion of Bernal Hill along with the closure McLaren Park would represent a portion (20.3%) of the existing DPA acreage in the Natural Areas and does not account for DPAs outside of Natural Areas but within other City parks. The DPAs at Buena Vista Park, McLaren Park, and Golden Gate Park Oak Woodlands are proposed for monitoring. It would be speculative, at this point, to determine the acreage of DPAs that could be reduced or eliminated based on future monitoring reports. Should those DPAs be recommended for closure based on results from monitoring reports, additional environmental review may be required at that time. In addition, on-leash dogs would be allowed continued access to all Natural Areas.

Also refer to Response LU-3, RTC pp. 4-215, for a discussion of the existing character of the Natural Areas Response G-19, RTC p. 4-88, and Response RE-13, RTC p. 4-347, for a discussion of available parkland within the city for both on-leash dog walking and off-leash DPAs.

4.B PROJECT DESCRIPTION [PD]

The comments and corresponding responses in this section cover topics in Draft EIR Chapter III, Project Description.

4.B.1 Support for the Project

Comment PD-1 General support for the project

The response to Comment PD-1 addresses all or part of the following individual comments:

NPS-1-13	BAAQMD-1-01	CAAONC-1-02
CBD-1-01	FOW-GGP-1-02	GGAS-1-05
GGAS-1-06	GGAS-1-08	GGAS-1-19
GGAS-1-23	GGAS-1-24	GLS-1-01
MSGG-1-01	Sierra Club-1-05	Sierra Club-1-06
Sierra Club-1-07	Bartley-1-01	Bartley-1-02
Bors-1-01	Cabada-1-01	Campbell-C-1-03
Creely-1-01	Flasher-1-01	Hatch-1-01
Holzman-1-01	Holzman-1-04	Kass-1-01
Kesel-1-02	Langille-1-03	Murphy-D-1-01
Rafferty-1-01	Rogers-1-01	Swenerton-1-01
PH-Antonini-01	PH-Brastow-01	PH-Gaar-02
PH-Mozingo-01	PH-Skain-01	

- General Comment: We are pleased to see that signage, in addition to fencing, is being recommended to protect sensitive wetlands. [NPS-1-13]
- I would like to voice my strong support for the Significant Natural Resource Areas Management Plan. Pollution, habitat loss and fragmentation, and invasive species all make it difficult for native plants and animals to survive in the city. The remaining remnants of grasslands, coast scrub, oak woodlands, riparian areas, and salt marshes in natural areas throughout San Francisco must be maintained and expanded in order to preserve the biodiversity which is San Francisco's most important natural element. [BAAQMD-1-01]
- We feel:
 - It is an innovative management plan to safeguard our City's Natural Areas.
 - Implementation of the Plan will help prevent the local extinction of plants and animals, improve habitat for wildlife, increase safety, and improve access and recreational use in Natural Areas.
 - It provides clear direction to the City on how to prioritize management and restoration of our Natural Areas.
 - The Plan is the most cost effective method for managing our resources and protecting these areas for future generations. [CAAONC-1-02]

- In general, we support the goals of the Natural Areas Plan which promote ecological restoration, community stewardship and sustainable management of San Francisco's natural areas. [CBD-1-01]
- The implementation of this innovative management plan will help improve the habitat and landscape for threatened local plants and animals, enhance public safety and improve access and recreational use of the designated Natural Areas. The Plan provides clear priorities and cost effective methods for management of resources and protection of these for future generations. FOW-GGP's fully supports the SNRAMP, and our mission is to provide stewardship: community advocacy and resources for the realization of the Plan's objectives for the Oak Woodlands Natural Area of Golden Gate Park. [FOW-GGP-1-02]
- Golden Gate Audubon supports additional funding to support additional Natural Areas Program staff. The SNRAMP is a 20-year plan that anticipates growing impacts on the natural areas. To be effectively implemented, the Project will demand more than the ten gardeners that are currently on staff. [GGAS-1-05]
- Golden Gate Audubon endorses the DEIR's selection of the "least toxic decision making model." (DEIR, at 90). Because the use of pesticides in San Francisco is extremely controversial, Golden Gate Audubon encourages the NAP to develop a comprehensive communication and education package prior to applications, especially near neighborhoods, schools, playgrounds, and other areas that may be accessed by children and other vulnerable groups. [GGAS-1-06]
- Golden Gate Audubon also endorses the intent to remove non-native trees with native trees or shrubs, as is appropriate for the habitat. [GGAS-1-08]
- Golden Gate Audubon strongly endorses management measure GC/OH-9a (Monitor the dog impact on wetlands and Islais Creek channel and consider appropriate restrictions (including fencing) to keep dogs out of the creek channel and wetlands). It is known that dogs have significant negative impacts on local birds and other wildlife populations. San Francisco Bay has already lost approximately 90% of its wetland habitats, leaving native wildlife that depend on such habitats few spots for rest, forage, and roosting. Dogs should be entirely excluded from the wetland and any riparian habitat areas. All dog play areas should be clearly delineated, preferably with fences. [GGAS-1-19]
- Golden Gate Audubon endorses management measure LM-4a (Maintain and enhance important bird nesting and foraging habitat to include the removal of invasive species and natural recruitment of preferred species). (DEIR, at 135) [GGAS-1-23]
- Golden Gate Audubon also endorses management measure LM-7a (Relocate the DPA to a different area to avoid disturbing breeding birds in the current location). Given the current moratorium on DPAs, it is unlikely that the DPA could be moved and that the only viable option is removal. While Golden Gate Audubon supports removing the DPA from the site, Golden Gate Audubon encourages the city to find a suitable location for the DPA that will not result in an impact to native wildlife or plants. While the SNRAMP would reduce the total number of DPAs currently in San Francisco, Golden Gate Audubon reminds the City

that new DPAs are being planned for Heron's Head Park, Lennar's Hunters Point and Candlestick Point development sites, Treasure Island, and other sites in the Sunset district. [GGAS-1-24]

- We therefore strongly support the adoption of its Draft Environmental Impact Report and the final approval of the Management Plan. [GLS-1-01]

- I am writing in support of the Natural Areas Program and Management Plan. [MGSG-1-01]

- Adaptive Management

We applaud the Report's endorsement of Adaptive Management as representing current best practice in natural resource management. [Sierra Club-1-05]

- Specific Recommendations

In general, with the exception of Sharp Park, we find the specific recommendations offered for each of the 22 Natural Areas in San Francisco to be very sound and consistent with best management practices and science, and recommend that they be adopted as part of the plan. [Sierra Club-1-06]

- Monitoring

We endorse the Report's recommendations to establish a robust monitoring program for each of the City's natural areas. [Sierra Club-1-07]

- I am writing in support of the Final Environmental Impact Report for the Significant Natural Resource Areas Management Plan Project 2005.1912E. [Bartley-1-01]

- I wholeheartedly support the tree removal proposed in this plan, naturally taking into consideration its impact on nesting bird species. I strongly feel that certain tree species, specifically Blue Gum Eucalyptus, are not only hazardous to humans but also a nearly useless plant for native birds. Sure some f[sic] our species have managed to adapt but this is primarily due to a lack of choice. These trees monoculture and muscle out our native understory and the associated plant and animal system that our native wildlife has evolved with. A tree plan even longer term than fifty years should consider native and near native trees such as Monterey Cypress and pines, Coast Redwood and Live Oak as gradual but steady replacements for all Blue Gum. San Francisco could and should set the standard for the elimination of this dangerous pest tree. [Bartley-1-02]

- Overall I feel the SNRAMP has been well prepared for the 31 natural areas within San Francisco. The Bayview Park section of the Plan, with which I am most familiar, is very well done and thoroughly covers all aspects involved in managing the natural resources of the area. I am pleased with the progress that has already been made there following SNRAMP guidelines. [Bors-1-01]

- Please accept the report for it is a long worked on and comprehensive review of the plan.

It is very important to save the last few public areas we still have that support native plants. Native plants are not only beautiful but also support our wildlife (insects, bees, birds). Let's keep some of it for future generation. [Cabada-1-01]

- The City's SNRAMP is truly an innovative plan that will improve wildlife habitat, access, and recreational uses while increasing safety. This comprehensive plan is the most cost effective method of managing our resources and protecting lands for future generations. [Campbell-C-1-03]
- As a twenty year resident of San Francisco I wanted to voice my support for the Natural Areas Plan. They conform to my sense of what is needed and possible in San Francisco. I support the moment to restore the Sharp Park golf course. [Creely-1-01]
- The proposed master plan for SF's natural areas is a great start at managing these ecologically, recreationally and socially valuable open spaces. Please do everything in your power to ensure the survival and health of these parks. The GGNRA has found that when the community is involved in maintaining and restoring the park, the diversity of park users and frequency of visits increases. Parks are what transform a neighborhood into a community. The Natural Areas provide special opportunities for families to experience nature right in the city. This is especially important for families without the means to travel to national and state parks. [Flasher-1-01]
- Please do whatever you can to save what is left of San Francisco's natural areas. If that means separating out the golf course at Sharps Park that may be what has to be done. But, the important thing is to leave some open space which can be used by the wildlife which is still left in our city. It will improve the environment the animals and the people who live there. [Hatch-1-01]
- I have reviewed the Draft Environmental Impact Report for SNRAMP wanted to make a few comments. I am the Director of the Environmental Studies program and professor of Biogeography at SFSU and have been involved in research and education at SFSU in the natural areas of San Francisco for many years. I think the natural areas are critical to the health of San Francisco and its citizens and urge you to go forward with certifying the EIR and allow SF Recreation and Parks, Natural Areas Program to continue to manage these critical natural areas within the city by implementing the SFNAP Management plan.

In sum although the potential for impacts of that addressed above may be unavoidable I think that the benefits far outweigh the impacts and that the project should continue as planned. [Holzman-1-01]
- The Significant Natural Resource Areas Management Plan (SNRAMP) is an innovative management plan to safeguard our City's Natural Areas. Its implementation will help prevent the local extinction of plants and animals, improve habitat for wildlife, increase safety, and improve access and recreational use in Natural Areas. The plan provides clear direction to the City on how to prioritize management and restoration of our Natural Areas and is the most cost effective method for managing our resources and protecting these areas for future generations. [Holzman-1-04]

- I urge you to follow the plan to thin out or remove many of the eucalyptus trees on Mt. Davidson.

I live within walking distance of Mt Davidson, and often walk in the open spaces. Only rarely do I venture into the eucalyptus forest because it is so messy and dangerous underfoot.

I would like to see open areas populated by native annuals, perennials, bushes, trees or even grasses.

I fear that the neighbors are misled into expecting dire results from your undoing of the past error of planting a "productive" eucalyptus forest. [Kass-1-01]

- SNRAMP is an innovative plan that will protect San Francisco's natural resources. Implementation of the plan will help safeguard local plants and animals by providing clear direction management priorities. This is the most cost effective method for managing San Francisco's natural resources. [Kesel-1-02]
- The Natural Areas Plan goals are sufficient [Langille-1-03]
- We support the draft EIR for the Significant Natrual Resource Areas Management Plan. It makes sense on a number of levels. The San Francisco elements need to be approved because they will guide the restoration of a very small part of our parklands and open spaces within the City.

We agree that trees need to be removed in limited numbers. For example at Lake Merced restored areas need to be opened to light so native species can survive. In many cases those trees are eucalyptus which impact soil chemistry and block light from coastal scrub. In other cases the trees may be pines or cypress growing on slopes that are shading out native vegetation. Often these trees sprouted from seeds burried by Western Scrub Jays, so they are not part of a planned parkland. These trees also fall when they reach maturity and cause significant erosion. The plan for removal of selected trees is appropriate and necessary, not only at Lake Merced but in other natural areas. [Murphy-D-1-01]

- The Natural Areas Program is an innovative management plan to safeguard our City's Natural Areas. Under the leadership of Christopher Campbell and Lisa Wayne we have embraced the goal of returning Fairmont Plaza to a thriving eco system. We realize this goal will take time, but through our on going work parties and the guidance from Parks & Recreation we are enjoying the positive changes in our green space. The Plan is the most cost effective method for managing resources and protecting these areas for future generations. It also engages the neighborhood in ongoing maintenance of the plaza. Our group has been inspired by the improvements and we are in discussions to work with the Parks Trust to set up an account to fund further restoration work in the park. The plan provides clear direction to the City on how to prioritize management and restoration of our Natural Areas. Recently the Parks & Recreation in conjunction with the Natural Areas Program worked with PG&E to mitigate potentially disfiguring addition of power lines in our natural area. I have every confidence that they will have the same influence when the AT&T boxes tentatively scheduled for this green space are up for approval. These are but two examples of how they

looked at a range of alternatives and the potential impacts for both natural and recreational amenities of the City's Natural Areas. [Rafferty-1-01]

- I would like to ask you to realize the importance of the 'Significant Natural Resource Areas Management Plan' for the City of San Francisco, please. With over 150 to 250 species being lost daily to extinction, preserving of our wild area or natural habitats, is essential. San Francisco, as you know, has many species of plants found no where else. Along with these unique plants are fauna that depend on them exclusively, i.e. the 'Hairstreak Butterfly'. Therefore, preserving these wild areas is even more important. [Rogers-1-01]
- The Significant Natural Areas Management Plan is a decade overdue and is based on painstaking research and innovative, cutting edge, sustainable land management practices. It represents a step in the right direction for the Recreation & Park Department, and indeed for the City as a whole. As a professional ecologist involved in urban restoration for the past 13 years, I can personally attest to the overflowing positive impact that the restoration activities this plan proposes can have on the quality of life and ecological integrity of our city. The SNRAMP is the most cost effective way for managing our precious and quickly disappearing natural gems and will help prevent the local extinction of plants and animals, improve habitat for wildlife, increase safety, and improve access and recreational use in Natural Areas. [Swenerton-1-01]
- Trees are wonderful things, but too many trees, like anything else, is not the best thing and, you know, thinning them out makes for a healthier environment sometimes. Makes it safer; makes it the ones that remain healthier, and they're -- I think careful tree removal would be something that is important. [PH-Antonini-01]
- So I support the plan wholeheartedly. I would like to see it go forward. I hope we have your support. [PH-Brastow-01]
- It's unfortunate that the draft EIR cannot talk about the environmental benefits of restoring San Francisco's natural heritage. The 31 natural areas in San Francisco are natural areas because they're remnants of the original landscape containing flora and fauna that were here when the Spaniards arrived in 1769.

So the goal is to try to protect what remains of San Francisco's natural heritage. And, you know, it's been a long time coming trying to get this EIR adopted, and I think we're getting very close now, and we can start implementing some of the action items in the management plan. I'm very excited about that. So I hope we have your support. Thank you. [PH-Gaar-02]

- Our counties have worked collaboratively and cooperatively to come up with a plan that really does address the issues of habitat preservation and to protect those species that are enumerated in the article -- in the draft EIR, specifically frogs, the red-legged rana aurora draytonii, the garter snake, and others. [PH-Mozingo-01]
- We need to move ahead with these -- this study itself in the defined, and give Park and Rec staff wherewithal to actually begin to improve our recreational facilities and our natural areas in San Francisco. [PH-Skain-01]

Response PD-1

These comments express support for the proposed project or individual components of the project and do not request changes to the text of the document. Accordingly, no further response and no changes to the Draft EIR text are required.

The proposed management activities anticipate continuation of the current NAP staffing levels, as reflected on Draft EIR p. 89; however, should funding increase, it is possible that staffing levels could be augmented and the pace of activity implementation could increase, although it is not anticipated at this time.

Most of the existing or potential future parks that one of the commenters mentions — Heron’s Head Park, Candlestick Point–Hunters Point, and Treasure Island — are outside of the control of the SFRPD, and it is unknown whether DPAs would be allowed at these locations. The SFRPD does control some parks in the Inner and Outer Sunset district, and no DPAs are planned for these parks.

Refer also to Response PD-25, RTC p. 4-201, for a discussion of the adaptive management process used to monitor and maintain the restoration activities within the Natural Areas.

Comment PD-2 Support protecting the Golden Gate Park oak woodlands
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The response to Comment PD-2 addresses all or part of the following individual comment:

GGAS-1-21

- Golden Gate Audubon strongly endorses the protection of Golden Gate Park’s Oak Woodlands. (DEIR, at 130). We do note that dog play areas should be well-delineated, preferably with fences, and that leash requirements should be monitored and enforced. [GGAS-1-21]

Response PD-2

This comment expresses support for an individual Natural Area. As noted on SNRAMP p. 6.15-10, there are two existing DPAs within and adjacent to the Golden Gate Park Oak Woodlands.

The comment regarding fencing these DPAs and monitoring and enforcing leash rules have been forwarded to the SFRPD staff and Commission for their consideration. However, SNRAMP p. 5-11 specifically states that if park users and dogs stay on trails, no further access restrictions or fencing would be required. If a lack of enforcement and compliance with leash laws continues and/or damage to sensitive habitat areas is observed, the SFRPD could consider restricting access to sensitive habitat areas, as described in the Dog Policy, which could include the installation of physical barriers. Permanent physical barriers, such as fencing, are viewed as a last resort to be used only after signage and other soft solutions have been shown to be ineffective. If fences are installed, public access would still be allowed on designated trails, and all fencing, if required at Golden Gate

Park or in other locations, will be low and rustic so as to not block views and to blend with the surrounding landscape.

4.B.2 Opposition to the Project

Comment PD-3	General opposition to the project
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The response to Comment PD-3 addresses all or part of the following individual comments:

MPIC-2-02	WTPCC-1-01	WTPCC-1-13
Armanini-1-01	Asher-1-02	Barnsdale-1-01
Besser-1-01	Bowman-1-02	Cook-1-06
Donovan-1-01	Freedman-1-01	Ghosh-1-01
Glikshtern-1-01	Gomez-1-01	Heldman-1-01
Hooker-1-03	Hu-1-01	Ingram-1-01
Johns-1-01	Johnson-1-02	Jungreis-1-06
Kalafati-1-01	Keating-1-01	Kessler-1-11
Kessler-1-12	Kessler-2-11	Kessler-2-12
Klebaner-1-01	Koster-1-01	Lansdown-1-01
Lendaro-1-01	Mattingly-1-03	Miller-E-1-01
Mills-1-01	O'Neill-1-02	Perry-A-1-01
Risk-1-07	Schlund-1-03	Scott-1-01
Scott-1-02	Scott-1-04	Shepard-A-1-02
Thayer-1-01	Thompson-C-1-01	Thompson-D-1-01
Valente-1-09	Valente-1-12	Zeiger-1-01
PH-Rotter-P-05		

- We absolutely oppose the Proposed Project and Maximum Restoration Alternatives because of the significant and unavoidable negative environmental impact these plans would have on the Park's aesthetics, cultural resources, wind and shadow, recreation, biological resources, hydrology, hazardous materials, and air quality. [MPIC-2-02]
- WTPCC concerns with the Natural Areas Program (NAP) are as follows:
 - > NAP's plans to cut 18,500 trees in parks controlled by SF RPD, including plans to cut 1,600 trees on Mt. Davidson
 - > NAP's use of herbicides, including repeated applications at the same site, poor signage, improper applications, and concerns about children and pets playing in areas where toxic herbicides have been applied
 - > NAP's plans to close access to areas under its management, including closing 9.2 miles of trails, and turning the park experience into one full of "Stay on the Trails" and "Keep Out" signs
 - > NAP's plans to remove existing habitat (especially bushes and trees) and replace it with grassland will destroy habitat needed by wildlife and birds currently living in our parks

- > NAP has done an extremely poor job of informing people, including park neighbors, of its plans; those plans were created without seeking input from park neighbors and park users
- > NAP has expanded far beyond its original mandate to protect and preserve remnants of San Francisco's natural heritage, into large-scale conversion of existing habitat into something completely different, conversions that will change the character and uses of the park for decades to come

Because of these concerns, WTPCC opposes the proposed NAP Management Plan (SNRAM) currently undergoing environmental review. We ask the Planning Department to address our issues and concerns with the Draft NAP DEIR (details below). We urge the Recreation and Park Commission to rethink its support of NAP's plans. The parks belong to the citizens of San Francisco, not to Natural Areas Program staff.

WTPCC opposes the expansion of NAP's mandate beyond the protection and preservation of existing remnants of San Francisco's natural heritage. The original Management Plan for NAP, written in 1995, was 12 pages long.

Over the years, however, NAP has claimed more and more city parkland, to the point that most of the land under NAP control does not have existing remnant habitat. Rather NAP has claimed land that it wants to change from the existing habitat that currently has few native plants to one that more closely resembles the habitat before Europeans settled in the area. Because of this expansion, the final SNRAM is 711 pages long.

WTPCC supports the idea of preserving existing remnants of the historical habitat. We do not support the idea of wholesale habitat conversion that requires cutting down thousands of healthy trees, extensive and repeated applications of herbicides, closure of access to large areas of our parks, and destruction of existing habitat needed by the animals and birds living there now. As a result, WTPCC opposes NAP and its current plans for our parks.

NAP's plan is extremely ill advised. It flies in the face of common sense. At its most benign, it is taking something beloved and beautiful and making it less beautiful. At its worst, it is exposing the residents of San Francisco to herbicides, the ravages of wind, erosion, run-off, and mudslides and it is exposing the city to liability for damaged and down-graded property. [WTPCC-1-01]

- The removal of trees from Mt Davidson and elsewhere in the city is not what the city needs or wants. Already, San Francisco has far fewer trees than other beautiful major cities. Gavin Newsom realized this when he visited Chicago and came back with ideas to plant trees on many meridians in the city. San Francisco was not planned with beautiful tree-lined streets-street trees for the most part have been an afterthought. Our parks and open areas are the only places where we can enjoy the beauty and atmosphere that trees bring. [WTPCC-1-13]
- Having lived and worked in the Bay Area my entire life, I am strongly opposed to the recent Environmental Impact Review and Natural Areas Program (NAP) Recommendations released by the SF Planning Department which threatens to confiscate parklands in San Francisco and Pacifica that I have enjoyed with my dogs for so many decades.

The draconian NAP recommendations call for closure of Dog Play Areas at Lake Merced, and substantial reduction in size of these areas in several parklands including McLaren Park, Bernal Hill, and Sharp Park. In addition, recommended “restoration” actions also call for the use of toxic chemicals and the cutting down of thousands of healthy, beautiful trees which would destroy the enjoyment of these parks for everyone [Armanini-1-01]

- To lose San Francisco’s forested areas would be shameful. Much of the city’s beauty is due to the great number and diversity of trees that we have. [Asher-1-02]
- San Franciscans should be warned that the movement to create so-called “natural areas” has not been successful in many places. It is based on a rather rigid view of what is “natural” and requires, ironically, intensive weeding, irrigation, and the use of pesticides. At the same time, it typically removes the areas in question from public use. None of this is appropriate for public parks. It will not serve San Franciscans well. Here in the East Bay we have witnessed similar campaigns. One is the 72-acre Berkeley Meadow. This area was landfill, so “restoring” it back to its natural condition was a leap of imagination. The Berkeley Meadow requires constant weeding, irrigation, the use of pesticides, and the entire area is behind chain link fence save for a short, fenced walk through part of it. It has become a kind of diorama for plant that does not meet the public need for open space and recreation. By contrast, the City of Berkeley’s nearby Cesar Chavez Park, which is of similar size, is in constant use by a multitude of users – including people walking, jogging, flying kites, walking dogs, taking photographs, picnicking, and bird watching. Cesar Chavez even has a thriving burrowing owl colony. I urge you to resist the most restrictive options proposed in the NAP EIR. They will be expensive and may, ironically, actually cause damage to the environment while not providing much-needed outdoor options for San Franciscans. [Barnsdale-1-01]
- Don’t tear down the trees @ Mt Davidson [Besser-1-01]
- Only in extreme cases should the Parks & Rec Dept defer from McLaren’s policy of NO “Keep off the grass” signs. These are city parks and are not major environmental conservation areas; plus non-native trees are part of our planted landscape and should be celebrated not demonized. [Bowman-1-02]
- We should not remove any existing vegetation (never mind 1100 acres, 1/3 of our parklands) to return these acres back into sand, with only coastal scrub plants. I love the lush vegetation in our parks and do not want ANY of it removed for any reason - but particularly for the ridiculous reason that a radical group (funded with my tax dollars) defines “natural” as only what was here before the city of San Francisco was built, and before our beautiful parks were created. [Cook-1-06] [Jungreis-1-06]
- I am writing to express my opposition to the proposed SF Recreation and Parks Department Natural Areas Program. [Donovan-1-01]
- I am absolutely appalled that the city is seriously considering removing 1,600 mature and healthy trees on Mount Davidson and replacing them with native shrubs which will required regular applications of hazardous pesticides. This is madness. [Freedman-1-01]

- We have far more pressing matters than changing our vegetation back in time. The costs alone makes this plan impractical. [Ghosh-1-01]
- The plan is criminal. Cutting healthy trees and using herbicides should be illegal. How can anybody possibly conclude that the plan would have no significant negative impact on wind and shadow, hydrology and water quality, and forest resources is a mystery.

Ideally I'd like the NAP eliminated all together. [Glikshtern-1-01]

- Whatever action is taken on Mt Davidson will impact the rest of our lives, as we plan to live in our home until death. We are not in favor of the plan for Mt. Davidson as outlined by the Natural Areas Program. We are unhappy with many aspects, but will focus on three core issues in this letter. [Gomez-1-01]
- I'm opposed to cutting down healthy trees and the use of pesticides. The plan would have a significantly negative impact with respect to wind, shade, hydrology water quality, and forest resources. [Heldman-1-01]
- The NAP program is based on non science, and the logic behind it is wrong as well. It would have us give up our recreational areas so that the beautiful, old trees can be eliminated in favor of grasses and plants that "should be there in the minds of the plans proponents, at some arbitrary point in time, back before we planted anything of our own choosing. It also uses toxic pesticides and chemicals to deal with the stumps. Add to that that the fact that there is never enough money or man-power to maintain these restoration "science" projects, and what you have is a nightmare scenario for our beloved parks. I have been going to those parks for decades. This is not what they need. Someone needs to put a stop to the NAP program. If not, they need to tell us citizens of SF what's so good about it. It wastes our money and destroys our trees. It locks us out of our parks. [Hooker-1-03]
- I was reluctant to submit comment because I fear my comment will be dismissed being from a "one of the dog people." However, if comments are being tallied pro and con, **I want my letter to be tallied as a critic of the NAP DEIR.**

(In the early 2000's people who walked with their dogs in the parks were some of the first park visitors to become aware of the actions and plans of the natural areas program. Dog walkers were the "canary in the coalmine," in alerting the public to the trail closures and the need for public oversight of the Natural Areas Program. Since then, some supporters of the NAP have tended to dismiss any criticism of the NAP if it came from a dog owner.)

Yes, I am concerned about the loss of recreational access in SF parks. But that is only one of many concerns. I am also concerned about NAP's violations of existing regulations protecting wildlife and the use of herbicides, NAP actions that are contrary to scientific evidence (or lack supporting scientific evidence), as well as numerous other NAP actions detailed in comments submitted by others. [Hu-1-01]

- Please reconsider and DO NOT let NAP destroy our parks in a misguided attempt to turn back the evolutionary clock and re -create an idealized "better" environment from a time before European settlers arrived, a time when San Francisco was mostly sand dunes and rocks, with few trees. Our city faces strict prioritization of scarce resources that when

allocated to parks should be to keep them safe and accessible, not create fenced-off gardens in the process destroying what we already have. This so-called “wholesale habitat conversion” would require tens of millions of dollars in taxpayer funding and unprecedented broad-scale volunteer hours for modest gains, if any. [Ingram-1-01]

- I live on Mt. Davidson and absolutely oppose the plan to deforest the mountain (as well as other forests in SF). [Johns-1-01]
- I have no idea why RPD would want to make the city less friendly to families and less friendly to recreation. But if the department chooses to go down this path, I pledge my unrelenting opposition, every step of the way. [Johnson-1-02]
- I’m opposed to this any plan that involves cutting down health tree’s. [Kalafati-1-01]
- I am opposed to any expansion of the designated natural areas to the extent resulting in restriction of the types of public recreational access to the particular public park areas. Our City parks are a treasured resource adding greatly to the quality of life and well being of the citizenry. As such, any proposal likely to result in restriction of full access of the people to the parks should be reviewed with greatly heightened scrutiny and suspicion. While development of native plant areas does seem generally laudable at first blush, such efforts are inappropriate for a municipal park if the result is fencing the people out of their parks. [Keating-1-01]
- To put in their grasses, NAP is destroying healthy trees – trees which, besides offering animal habitat, offer shade, wind barriers, beauty and psychological relief. The trees are part of ecosystems which were established over 100 years ago. They are a part of a balanced, healthy animal habitat. What ever happened to saving the trees? [Kessler-1-11] [Kessler-2-11]
- For all these reasons, the Proposed Project as well as the “Maximum Restoration Alternative” are bad for wildlife, habitat and environment. [Kessler-1-12] [Kessler-2-12]
- I’m opposed to this plan. Cutting healthy trees and using herbicides should be illegal. It **would** have **significant negative impact** on wind and shadow, hydrology and water quality, and forest resources - the findings are incorrect. [Klebaner-1-01]
- The expansion of the NAP and the destruction of healthy, mature trees in many areas of SF is not only a waste of tax-payer money but a blight on the landscape. If more people were aware of the plan, I’m sure they would be pounding down the doors of City Hall in protest. But ordinary citizens are too busy with their lives, working, taking care of their children, etc. Also, there is no coverage of this issue in our local papers as far as I have seen. I have seen pictures of SF in the 1800s and it is not an attractive sight. Windswept, barren sand dunes creating wind tunnels from the ocean to downtown. Is that what we want to recreate? If this inevitable result of what the NAP supporters desire was put to the public in an open vote, I’m sure it would be voted down. As representatives of the citizens of SF, I urge you to support our interests and reject the EIR and the specious “science” it’s predicated upon. [Koster-1-01]
- Furthermore, by their own admission, NAP can barely manage the land they have. Two years ago, they met then Mayor Newsom, demanding more money for their program,

claiming they didn't have the budget for the projects they were then attempting. And now they want more?!?!?! They want more land and more money to perpetuate this myth that they can restore the land to pre-Columbian condition. That is not even possible. [unreadable text] As a taxpayer and home owner in the city of San Francisco, I demand this folly be wrapped. [Lansdown-1-01]

- Has anyone really looked at these native plants they are really really ugly....no one thinks they are worth saving at any cost... Every one who votes for this will NEVER get reelected because there are so many dog lovers in SF they won't stand a chance... Do we really need another matter to be upset about during these trying times...political unrest war and unemployment...now where to walk your dog. Give us a break....put this on the back burner until the economy turns around and we have jobs to go to instead of walking our dogs... [Lendaro-1-01]
- I am also very unhappy to hear that you plan to cut down scores of healthy 'non-native' trees with a desire to create a more open scrub bush and grassland environment. I understand many species have adapted to the more forested environment, including some endangered species. This seems like a very rash idea that could have unexpected domino effects. Has anyone studied any of the repercussions? [Mattingly-1-03]
- As a Glen Park resident, homeowner, and parent I am horrified at many of the key elements planned by your department for Glen Canyon Park. As I read the impact report your department published I am appalled at the surrealistic objectives you and your fellow bureaucrats have established for the park. Your plan is the apex of SF governmental absurdity - in the midst of the starkest economic crisis since the Great Depression, massive SF budget deficits, reduction in essential services, and cuts in programs for our children you are going to spend our taxes to chop down 120 beautiful Eucalyptus trees and an unspecified number of Willow trees, close "social trails," deny access to rocks my kids like to climb, make "pools inaccessible to the public," so you can plant "native" grasses, reintroduce a damselfly, and install larval host plants, etc.?!? It seems you feel Glen Canyon Park is your department's petri dish instead of a city park? Your plans have been challenged as absurd and misguided by a Distinguished Professor of Evolution and Ecology at UC Davis and other well informed scientists, ecologists, and citizens and yet you will proceed? [Miller-E-1-01]
- As an environmentalist with a degree in Environmental Studies, a member of the Sierra club and avid city parks user, I'm writing to argue against the SF Recreation and Parks Department's plans to destroy 18,000+ trees and reintroduce "native" and endangered small plants in their stead. This plan would limit the SF humans' and their pets' access to the parks we pay tax dollars to RECREATE within. The SF Recreation and Parks Department should remove "Recreation" from it's title if this plan goes forward. If restricted plants are planted and their areas then closed off for recreation, it seems this would not be under the mission of a city recreation and parks department but under a natural preservation zone. Such an area would not make sense to put in a densely populated city environment. For a final more globally based environmental question, how can a country that "scolds" Amazonians, Guatemalans and other societies for tearing down trees for subsistence needs like fuel and/or

to grow food have the guts to rip down trees that keep our air clean for the sake of the word “native” which seems a very disputable word. I must contest this proposal. Thank you and I hope you truly consider the views of this city’s most populous residents, the dog owners. [Mills-1-01]

- Finally, putting aside the important considerations regarding why off-lease areas, which this plan would restrict, are so important to dogs and their owners, I question the validity of expansion of the Natural Areas Program on it’s face. It seems to me that the Natural Areas Program has as its ultimate goal a restoration of San Francisco to it’s “natural” state, which they define as limited to flora and fauna dating from a time before major settlement. In order to recapture this environment, they propose:
 1. Restricting use of our parks to large segments of San Francisco’s population,
 2. Destroying healthy living trees and plants because they came into the environment after the time the Natural Areas Program has deemed ‘natural’ and therefore permissible*, and
 3. Introducing toxins into the environment in order to destroy plants and trees not meeting their criteria.

It seems to me they want to turn the City’s parks into museums to a time past, rather than living, evolving environments for this City’s citizens to enjoy. Let’s face it, our lovely Golden Gate park exists largely outside of the parameters of the “Natural Areas”. [O’Neill-1-02]

- I became aware of the NAP’s intention to cut down many of the healthy and beautiful trees on Mt. Davidson from the local paper, and some fliers. My husband and I are both completely against it, and are disgusted by this plan. First, as residents of Westwood Highlands, located on the south side of Mt. Davidson, we can’t even understand how this idea could have ever been considered a good one. The beautiful trees, and the smell of Eucalyptus are wonderful and add to the beauty of this mountain and the park.

With all the government “wasteful” spending going on not only in the federal, but state government as well, I would think that there are better ways to spend local taxpayers money.

Don’t do it.

Feel free to call us if you want more information regarding our thoughts on this particular matter. [Perry-A-1-01]

- In summary, we object strongly to the Significant Natural Areas Management Plan proposals for Mt. Davidson and to the lack of community involvement in the drafting of those plans. We also contend that the Draft Environmental Impact Report of the SNRAMP is deficient in many respects. [Risk-1-07]
- The NAP program removes non-native vegetation, including mature trees. While these plants and mature trees might not be native, they are beautiful and desirable. It does not seem clear why replacing them with native species is a desirable goal. [Schlund-1-03]

- Expanding the Natural Areas Program as has been proposed is a wrong-headed idea that will waste scarce budget dollars and will not serve a majority of city residents. [Scott-1-01]
- The NAP attempts to turn the clock back to a time when San Francisco was primarily sand dunes. Most of us enjoy our parks with large non-native, but healthy trees. Not enough money is allocated to maintenance of the existing natural areas, resulting in high use of herbicides and weedy unattractive areas. Why does anyone want more of that? [Scott-1-02]
- While I am not opposed to preserving existing areas of natural habitat, I am strongly opposed to cutting down non-native trees, using heavy doses of herbicides, destroying existing non-native areas that are home to birds and animals that have adapted, and removing large areas of our parks from recreational use by people and dogs. [Scott-1-04]
- NAP introduced this plan to remove trees, reduce trails and severely restrict access to recreation, repeatedly spray toxic herbicides in areas where children recreate, destroy existing habitat that supports animals which live in our parks, and violate state law governing the use of herbicides. And they spend money on cutting down healthy trees which provide habitat for many animals, instead of spending the money on maintaining trees in parks for citizen safety. For example, in 2003, a study was done to identify the health of the trees in Stern Grove. Many trees were identified as hazardous and in need of maintenance. RPD did not perform the prescribed maintenance on those trees, but did cut down non-native trees. In 2008 a woman was killed by a falling tree branch that had been identified in this study. [Shepard-A-1-02]
- Please don't develop Mount Sutro any further. The area needs to maintain its serenity in order to remain a nice destination for people from all around the Bay Area, both for hiking and otherwise.

Thank you for your time and for keeping Mount Sutro one of the few natural areas left in the city. [Thayer-1-01]

- This is a response from a Glen Canyon Park supporter who has lived in Glen Park for over 26 years and has enjoyed and loved daily walks through Glen Canyon Park. Please, please, please, stop the misguided people who claim to have and share the best interests of most of us who love this park. The park first and foremost belongs to ALL of us; it exists for us all. It is a NATURAL HABITAT and as such should be protected from ruin by the above over earnest small group of very vocal people who want to turn it into another botanical garden. We already have a S.F. Botanical Garden where people can enjoy all kinds of flora (including a large area of native plants of the Bay Area). [Thompson-C-1-01]
- This restoration movement doesn't make sense. We live in THE CITY. Should we get rid of the buildings too? Should we return Golden Gate Park to sand dunes? California has a LOT of nature. It just doesn't happen to be in the CITIES, because they are CITIES. [Thompson-D-1-01]
- NAP does not reflect the social conscience of San Franciscans. The NAP plans to destroy 18,400 mature (defined as over 15 feet tall) trees and untold numbers of seedlings and saplings merely because they are non-native. There can be no legitimate dispute that this

does not reflect the desires of the population at large. The overwhelming majority of the public loves trees, and does not care about their origin. We appreciate the fact that mature trees improve the air quality in our urban environment and improve the beauty of the City. Thus, on one hand, we have the Mayor's program to plant more trees in the City, and on the other hand, we have NAP removing them. This is tantamount to digging a hole and then filling it up. We would point out the trees to be planted under the Mayor's program are non-native. In many cases NAP declares all or portions of city parks directly adjacent to residential neighborhoods as "natural areas." Often no plants, birds or animals in the park are listed as endangered or threatened by the State or Federal government. Nor are there any "sensitive" species here as designated elsewhere in the NAP proposal by local native plant and bird enthusiasts. Yet, there is as part of the plan an objective to reduce "predation pressures". This would refer to the killing of feral cats and any other wildlife NAP deems unacceptable. Considering the proximity of this park to residential development, the trapping of cats and other wildlife on this park property could result in the destruction of pets. NAP proposes to kill bullfrogs and non-native turtles because they are believed to be competitors to native animals. This certainly offends the sensibilities of San Franciscans and our long history of devotion to animals in general and our pets in particular. [Valente-1-09]

- NAP destroys park property and is unsustainable. NAP intends to destroy current flora and fauna on 1100 acres, not a mere 100 acres. NAP subsequently must revegetate these areas with native plants, and supervise them until they have matured. Beyond that, those proposing this NAP have failed to advise you that these properties will require intense management in perpetuity. NAP as proposed and as it is currently implemented is a miserable failure. The NAP Management Plan states that trees (at least those taller than 15 feet) removed will be replaced on a nearly one-to-one basis, although it acknowledges that the replacements may not be planted in the same area, or even in the same park. However, there are reasons to doubt this claim. In a few parks, NAP has planted native plants to replace non-natives that it cut down. Most of the trees did not survive. NAP and its supporters cut down 25 young trees at Tank Hill about a decade ago. The few trees that NAP left standing had their limbs severely cut back to allow more sunlight to reach a newly planted native plant garden. Only four of the more than two dozen live oaks that were planted as replacements have survived. NAP may claim they will plant native trees to replace the healthy non-natives cut down, but most won't survive and the character of the parks that once had healthy forests will change. [Valente-1-12]
- There are many problems with the Natural Areas Program. I don't have the time or capacity to enumerate all of them in my following brief comment. However, the SF Forest Alliance has done a monumental job of research to accomplish that feat. Hopefully their careful and incisive research will be given the close attention it justly deserves.

Nap needs to be scaled back substantially mainly because it's failed to accept that urban parks represent a respite from city life and the opportunity for recreational uses first and a very distant second, a museum for native plants. I see no justification for nap's self-anointed permission to exert control over how park visitors may use and enjoy their parks - imposing fences and signage. [Zeiger-1-01]

- The destruction of the number of trees is a gross violation. San Francisco has barely one tree per citizen in this city, and this proposes to turn down a large percentage of that. It shouldn't be done. Thank you very much. [PH-Rotter-P-05]

Response PD-3

These comments express opposition to the project (and the Maximum Restoration Alternative, which is also addressed in Response AL-, RTC p. 4-568). Concerns include the removal of trees and existing habitat, use of herbicides, closure of trails, the conversion of DPAs to on-leash dog areas, and the lack of community involvement. Refer to Response G-3, RTC p. 4-19, for a discussion of the independent scientific review of the 2005 Draft SNRAMP; refer to Response RE-13, RTC p. 4-347, for a discussion of the conversion of DPAs to on-leash dog areas; and refer to Response G-10, RTC p. 4-50, for a discussion of the public outreach/community involvement process.

With respect to the number of trees that will be removed, as stated in Draft EIR Chapter III, Project Description, p. 92, invasive trees that are removed would be replaced with native tree species at a ratio of roughly one-to-one, although not necessarily at the same location or within the same Natural Area.

Comments Kessler-1-12 and Kessler-2-12 refer to all of their previous comments (Comments Kessler-1-1 and Kessler-2-1 through Comments Kessler-1-11 and Kessler-2-11), all of which have been addressed in this RTC document (see Appendix A for specific locations).

While one of the commenters inferred that the project planned to destroy trees, the stated objectives of the SNRAMP, as reflected on Draft EIR p. 82, instead are to:

- To identify issues and impacts adversely affecting ecosystem functions and biological diversity;
- To identify, prioritize, and implement restoration and management actions designed to promote the functioning of San Francisco's native ecosystem, including the maintenance and enhancement of native biodiversity;
- To identify and prioritize monitoring of natural resources to support an adaptive management approach;
- To provide guidelines for passive recreation compatible with San Francisco's natural resources;
- To provide guidelines for education, research, and stewardship programs; and
- To restore the Laguna Salada wetland complex⁴¹ for the benefit of special-status species.

⁴¹ The Laguna Salada (or Sharp Park) managed wetland complex consists of three features: (1) Horse Stable Pond (HSP), an open water pond and fresh-brackish water wetland; (2) Laguna Salada (LS), which is located north of HSP; and (3) An approximately 1,000-foot-long channel with culverts (metal pipes that are located underneath golf cart pathways), which was constructed to drain water from LS to HSP.

As the above objectives indicate, the SFRPD seeks to balance the need for maintaining and enhancing San Francisco's ecosystems and natural resources with the need for providing recreational opportunities, along with education, research, and stewardship programs. In fact, in a peer review conducted by Peggy Fiedler, PhD., Dr. Fiedler concluded that the Plan in general succeeded in its goals and "strikes a balance between natural resource protection and the needs of citizens in a highly urbanized, densely populated, highly ethnically diverse, overall well-educated area."

With respect to the use of pesticides and herbicides (sometimes referred to as hazardous materials by the commenters), refer to Response HZ-1, RTC p.4-531, for a discussion of the least-toxic decision-making model that the SFRPD employs in the application of pesticides and herbicides. Refer to Response BI-1, RTC p. 4-351, for a discussion of the burrowing owl.

One commenter indicated that the plan would have a significantly negative impact with respect to wind, shade, hydrology, water quality, and forest resources. While the Draft EIR did conclude that there would be significant and unavoidable impacts related to cultural resources and air quality on a project-specific basis and cultural resources, recreation, biological resources, and air quality on a cumulative basis, there were no significant and unavoidable impacts related to wind, shade, hydrology and water quality, or forest resources; all impacts were found to be less than significant or could be reduced to a less-than-significant level after implementation of the identified mitigation measures. Refer also to Response WS-1, RTC p. 4-309, and Response WS-2, RTC p. 4-310, for a discussion of wind impacts at Mount Davidson and Pine Lake and wind impacts from tree removal, both as a result of the proposed project and in association with the project alternatives, respectively. The commenters do not provide substantial evidence that would change the conclusions of the Draft EIR.

Otherwise, the comments express general opposition to the proposed project or individual components of the project.

Comment PD-4 Opposition to habitat restoration activities

The response to Comment PD-4 addresses all or part of the following individual comments:

Adams-S-1-01	Armanini-1-02	Art-1-02
Asher-1-01	Bley-1-01	Burgard-1-01
Cook-1-02	Delacroix-1-02	Elkins-1-01
Fox-1-02	Garber-1-02	Hecht-1-04
Heldman-1-02	Hovland-1-01	Jungreis-1-02
Lu-1-01	Mattingly-1-01	Potts-1-01
Ray-1-02	Rotter-P-1-02	Shapiro-1-01
Stewart-E-1-01	Valente-1-06	

- This is regarding San Francisco's Park and Recreation Department's plan to reduce dog parks throughout the city in favor of implementing a Natural Area Program. My comment is: What are you thinking? Have you no sense of history or geology? You think you can restore environment of a major metropolis to its original state? Over time, things change. I get that we don't want a non-native species to consume and take over everything in our parks, but to kill perfectly healthy trees, to pull up all that ice plant along the coast simply because it is non-native is simply nuts. First, we can't support this program financially, and second, what about the dogs? [Adams-S-1-01]
- I find the proposed "restoration" actions particularly offensive, as they are founded largely on subjective ideology that arbitrarily values theoretical vegetation and fauna from long ago in favor of current terrain and wildlife that has established itself there. I am in complete agreement with Dr. Arthur Shapiro's statements and am appalled by the fanatical ideology and proposal for current parkland and habitat destruction, especially in these difficult economic times. [Armanini-1-02]
- The Natural Areas Program defines "natural areas" as areas planted only with plants that grew here when San Francisco was all sand and sand dunes. Before our city was built. Before our lush parks were created. This narrow definition of what is "natural" is absurd. A natural area should be defined by the amount of wildlife it supports. By this definition, our parks are natural areas. Why on earth would we want to return our parks to sand with tiny sand dune plants and coastal scrub when our parks have such incredible natural beauty and support such an incredible diversity of wildlife? [Art-1-02] [Cook-1-02] [Delacroix-1-02] [Fox-1-02] [Jungreis-1-02] [Ray-1-02]
- I am opposed to the creation of yet more 'natural' areas in San Francisco. What was appropriate a few hundred years ago is no longer the case. John McLaren would likely be on my side here. Change is a natural process. The environment, climate, populations (and needs of same) are different now. To restore planted areas to that of a historical period of time deemed appropriate isn't practical. If you want to get technical, lets go back to the time when earth was covered by oceans (which may turn out to be the case in due time anyway). [Asher-1-01]
- In regard to cutting down healthy trees, please do not proceed with the San Francisco Recreation and Parks Department's Natural Areas Program. According to the SF RPD's own outreach material, this will involve the felling of thousands of healthy trees to make way for plots of as-yet-unplanted native vegetation that will require increased use of pesticides and herbicides. The native plants have a poor chance of survival (many of SF RPD's previously planted native trees and shrubs have died before being able to take hold), the program blocks off trails and other areas of public use, and the existing trees, though non-native, are healthy, thriving, and contribute all of the benefits that large, living trees offer (urban cooling, pollution mitigation, verdant views, and more). It will take immense amounts of energy, money, effort, time, and increased pollution to move forward with the tree removal and native plantings; instead, please leave the trees standing and use just a fraction of the proposed NAP resources to maintain them. [Bley-1-01]

- As a resident of Miraloma Park since June 2003, we have been able to regularly enjoy the beauty of the forested hill of Mount Davidson both from accessing the trails for hikes and explorations with our family and from the windows of our home on Molimo Dr. We fill that the plan to deforest the hill of mature trees to return the area to native plants is an ill-conceived venture as the park has a natural beauty and ecology that is well serving the community that surrounds it.

Further, the native ecology of the hill has been in flux for millions of years. It is true on our planet that ecological conditions have changed, at times, over thousands of years as well as in much shorter periods. [Burgard-1-01]

- I'm writing to protest the planned "restoration ecology" plan and "native plant" efforts to be undertaken in Glen Canyon and elsewhere in the city. The canyon is a much-used resource, by walkers, hikers, runners, climbers, summer campers, parents with strollers, pet owners, students, a whole spectrum and cross-section of the population. Anecdotally, people have told me that they come from cross-town to walk in the area. What is the thinking about pulling out all the well-established trees, scrub and other plants, in the name of re-establishing some old-fashioned starting point for local flora? Have you looked at old photos of the area? There's grass and some scrub on the hills. Today, there's grass, scrub and trees - plus community gardens. Who's determining the concept of "original" and "pristine"? What is the zero point? Is there science behind it, or politics? What is driving this bus? I urge you: reconsider this policy. As a city that's always challenged fiscally - especially in Park and Rec - we don't have the extra money to undertake an effort that's not focused, on questionable scientific ground and, most importantly unpopular AND disruptive. If the funds are there and begging to be used, please find a place that can use real improvement that will directly affect people's actual use of the site. [Elkins-1-01]
- This proposed environmental assault by SF Recreation and Parks is the result of an unfortunate effort by people with a knee-jerk response to the idea that nonnative plants are intrinsically bad for public lands. This is not based upon objective research but rather upon prejudice. The net negative environmental impact upon public lands will [Note: the letter includes no additional text.]

Natural communities evolve. The idea that a place needs to be "restored" to a snapshot point in time ignores the complexity of an evolving environment and only acknowledges that the megafauna of that point in time as being the important thing to be considered in public land management. [Garber-1-02]

- I agree whole heartedly with Professor Arthur Shapiro's evaluation, "The creation of small, easily managed, and educational simulacra of presumed pre-European vegetation on San Francisco public lands is a thoroughly worthwhile and, to me, desirable project. ...The proposed wholesale habitat conversion advocated here does serious harm, both locally (in terms of community enjoyment of public resources) and globally (in terms of carbon balance-urban forests sequester lots of carbon; artificial grasslands do not). At both levels, wholesale tree removal, except for reasons of public safety, is sheer folly." [Hecht-1-04]

- In addition, the “non-native” argument seems to me to be arbitrary. One can choose whatever date he/she wants to characterize a specific kind of vegetation as “native.” There may well have been other times in the past, before the introduction of the eucalyptus, where then “native” plants were out-competed by some other new vegetation. [Heldman-1-02]
- I am strongly opposed to the destruction of non-native trees and other non-native vegetation in an attempt to restore native habitat. There is no scientific evidence to support the idea that native plant restoration is environmentally superior to a habitat that includes a diversity of tree and plant species, whether they are native or introduced to this part of California. Also, many plants and trees that thrived before the Europeans arrived here are no longer suitable for this climate and require a lot of watering and weeding (i.e. gardening) to create conditions that might make them grow as long as a great deal of energy (and water) are put into maintaining them. As the climate continues to change, native plants and trees will become even less likely to survive, no matter how much TLC is given them. [Hovland-1-01]
- I am writing to express my dismay regarding the Natural Areas Program (NAP) disruption to San Francisco park areas. I am a 20-year resident of San Francisco and advocate for the natural environment (NRDC). The idea of “original” habitat restoration in the midst of urban areas is, in my opinion, misguided. I am not convinced that restoration of native species will succeed, and I do not agree that the effort required to do so is a good use of limited resources. Some of the attempts to “improve” local park areas have been obvious failures. The speculative impacts of people, plants and animals described in the EIR do not provide a sound basis for large-scale land use redirection. Programs such as NAP are, in fact, highly disruptive to already-established communities of flora and fauna, which may be non-native but at this point deserve to be left in place. If public safety is an issue, due to naturally occurring root system failure, weather, or erosion, those issues should be addressed as they arise. Resource-intensive, anticipatory, poorly researched and planned interventions are usually ill advised. In my opinion, NAP is squarely in the ill-advised category due to mechanical and chemical interventions applied in a densely populated, frequently visited region. [Lu-1-01]
- Planting ‘native’ plants that then mostly die due to lack of maintenance suggests that the ‘native’ plants are no longer viable in the current San Francisco area climate. With climate change, plants better suited to this area seem like better options than trying to restore plants that may have been native hundreds of years ago. [Mattingly-1-01]
- I have lived in San Francisco for almost 30 years. Years ago I lived at the base of Mt. San Bruno and used to go for daily hikes after work until one fine afternoon I came around the corner to find the entire mountain had been clear cut. I have only been back one time since. In my humble opinion the park and the beautiful trails that once threaded along under the eucalyptus grove was completely ruined do to that plan to restore the mountain to it’s original habitat.

Now all these years later I live in Glen Park just one block away from the canyon, where my two daughters go to Glenridge co-op nursery school, needless to say after 10 years of living here i have come to find out that the city plans to cut down the eucalyptus there now and

start the application of pesticides to prevent unwanted growth in the canyon. I can't begin to tell you how upset this has made me.

What is next? Golden Gate Park started as sand dunes, will it be returned to its original state too?

Please do not let this happen! [Potts-1-01]

- We had the good fortune to read a letter (10-6-11) to you on this matter from Professor Arthur M. Shapiro, Distinguished Professor of Evolution and Ecology at UC Davis. We hope you will have read his letter to gain some understanding of the long range environmental issues at stake. The NAP program of massive tree removal, animal habitat destruction, extensive herbicide use is not a sound policy under the conditions of global environmental changes that have been evident for many years. We ignore this at great peril. [Rotter-P-1-02]
- At a time when public funds are exceedingly scarce and strict prioritization is mandatory, I am frankly appalled that San Francisco is considering major expenditures directed toward so-called "restoration ecology." "Restoration ecology" is a euphemism for a kind of gardening informed by an almost cultish veneration of the "native" and abhorrence of the naturalized, which is commonly characterized as "invasive." Let me make this clear: neither "restoration" nor conservation can be mandated by science – only informed by it. The decision of what actions to take may be motivated by many things, including politics, esthetics, economics and even religion, but it cannot be science-driven. In the case of "restoration ecology," the goal is the creation of a simulacrum of what is believed to have been present at some (essentially arbitrary) point in the past. I say a simulacrum, because almost always there are no studies of what was actually there from a functional standpoint; usually there are no studies at all beyond the merely (and superficially) descriptive. Whatever the reason for desiring to create such a simulacrum, it must be recognized that it is just as much a garden as any home rock garden and will almost never be capable of being self-sustaining without constant maintenance; it is not going to be a "natural," self-regulating ecosystem. The reason for that is that the ground rules today are not those that obtained when the prototype is thought to have existed. The context has changed; the climate has changed; the pool of potential colonizing species has changed, often drastically. Attempts to "restore" prairie in the upper Midwest in the face of European Blackthorn invasion have proven Sisyphean. And they are the norm, not the exception. The creation of small, easily managed, and educational simulacra of presumed pre-European vegetation on San Francisco public lands is a thoroughly worthwhile and, to me, desirable project. Wholesale habitat conversion is not. A significant reaction against the excesses of the "native plant movement" is setting up within the profession of ecology, and there has been a recent spate of articles arguing that hostility to "invasives" has gone too far – that many exotic species are providing valuable ecological services and that, as in cases I have studied and published on, in the altered context of our so-called "Anthropocene Epoch" such services are not merely valuable but essential. This is a letter, not a monograph, but I would be glad to expand on this point if asked to do so. I am an evolutionary ecologist, housed in a Department of Evolution and Ecology. The two should be joined at the proverbial hip. Existing ecological communities are freeze-frames from a very long movie. They have not existed for eternity, and many have

existed only a few thousand years. There is nothing intrinsically sacred about interspecific associations. Ecological change is the norm, not the exception. Species and communities come and go. The ideology (or is it faith?) that informs “restoration ecology” basically seeks to deny evolution and prohibit change. But change will happen in any case, and it is foolish to squander scarce resources in pursuit of what are ideological, not scientific, goals with no practical benefit to anyone and only psychological “benefits” to their adherents. If that were the only argument, perhaps it could be rebutted effectively. But the proposed wholesale habitat conversion advocated here does serious harm, both locally (in terms of community enjoyment of public resources) and globally (in terms of carbon balance-urban forests sequester lots of carbon; artificial grasslands do not). At both levels, wholesale tree removal, except for reasons of public safety, is sheer folly. Aging, decrepit, unstable Monterey Pines and Monterey Cypresses are unquestionably a potential hazard. Removing them for that reason is a very different matter from removing them to actualize someone’s dream of a pristine San Francisco (that probably never existed). Sociologists and social psychologists talk about the “idealization of the underclass,” the “noble savage” concept, and other terms referring to the guilt-driven self-hatred that infects many members of society. Feeling the moral onus of consumption and luxury, people idolize that which they conceive as pure and untainted. That may be a helpful personal catharsis. It is not a basis for public policy. Many years ago I co-hosted John Harper, a distinguished British plant ecologist, on his visit to Davis. We took him on a field trip up 1-80. On the way up several students began apologizing for the extent to which the Valley and foothill landscapes were dominated by naturalized exotic weeds, mainly Mediterranean annual grasses. Finally Harper couldn’t take it any more. “Why do you insist on treating this as a calamity, rather than a vast evolutionary opportunity?” he asked. Those of us who know the detailed history of vegetation for the past few million years – particularly since the end of Pleistocene glaciation – understand this. “Restoration ecology” is plowing the sea. [Shapiro-1-01]

- Hello, my name is Ethan Stewart. My family and I live on Stanford Heights Avenue in Miraloma, and I am writing about the proposed natural area plan for Mt. Davidson. I am opposed to the current plan of healthy tree removal in native plant restoration. The trees that exist there are already part of the urban environment. There is really no such thing as being able to return any area to a “native” habitat, especially when tree removal results in the potential for greater wind erosion, harsher treatment through pesticides to control non-native plants and animals and in fact greater destruction to the Mt. Davidson recreation area through greater potential for non-native species to crowd out any attempts at restoration. As a frequent hiker to the area, the trees provide habitat for birds, butterflies and other species now living on Mt. Davidson, and should be protected. Additionally, as someone who is concerned about native environments and habitats along with quality of urban living, I am opposed to the plan simply because it seems misguided. Urban environments are by definition non-native and the most reasonable solution is to preserve what makes the area wonderful while doing whatever is possible to minimize damage elsewhere. Attempting to recreate something that may or may not have existed can very well lead to even greater problems. Please consider revising or rejecting the proposed draft for Mt. Davidson. Mahalo for your time and consideration. [Stewart-E-1-01]

- NAP does not meet scientific scrutiny. In regard to the Management Plan itself, Professor Connor stated: “I have read this plan and it is without scientific basis, it does not articulate clear, achievable, nor appropriate conservation goals for a set of small urban parks, it is void of an examination of the cost, feasibility, or utility of the management actions recommended, and it is without any sense that our urban parks must satisfy the needs for a wide variety of uses. I acknowledge that conservation numbers among the uses to which I would like to see our parks put, but not necessarily at the expense of other uses that are appropriate for urban parks and inappropriate in wild lands.” Arthur M. Shapiro (Professor of Evolution and Ecology at UC Davis) states the following. It cannot be allowed to trump the clear preferences of the vast: “The Natural Areas Program has its place, and it needs to be kept in that place majority of parkland users in San Francisco. The hatred of “exotic” trees, some of which are California natives anyway, is not only ideological but sometimes verges on the pathological, and has strong overtones of xenophobia and racism (look at the anti-“exotic” rhetoric yourself!). He also notes, “... the extensive adoption of introduced host plants has clearly been beneficial for a significant segment of the California butterfly fauna, including most of the familiar species of urban, suburban, and agricultural environments. Some of these species are now almost completely dependent on exotics and would disappear were weed control more effective than it currently is.” (S.D. Graves and A.M. Shapiro, “Exotics as host plants of the California butterfly fauna,” *Biological Conservation*, 110 (2003), pp. 413-433) A classic example of this is the migrating Monarch butterflies who overwinter in eucalyptus trees in several locations on the coast of California [Valente-1-06]

Response PD-4

These comments express opposition to the project, particularly with respect to the proposed restoration activities that include planting of native plants rather than nonnative plants. Further, the scientific basis for the proposed restoration activities is questioned.

One commenter mentions that the project proposes to reduce dog parks throughout the city in favor of implementing a NAP while other commenters appear to imply that the NAP is the same as the SNRAMP. An important distinction is that the NAP is an existing program whose mission is two-fold: to preserve, restore, and enhance remnant Natural Areas and to develop and support community-based site stewardship of these areas. The SNRAMP provides a framework for the long-term management of the Natural Areas. Combined, the NAP and the SNRAMP would preserve, restore, and enhance the City’s Natural Areas. In terms of the reduction of dog park areas, out of 32 DPAs, the project proposes to close one DPA and reduce the size of two DPAs. Further, with the three DPAs that are proposed for modifications within Natural Areas, 80 percent (or 79.5 acres) would remain.

One of the commenters mentioned that the proposed project would include a wholesale habitat conversion. Some of the key objectives of the SNRAMP, as articulated on SNRAMP pp. 1-3 and 1-4, are to (1) identify and prioritize restoration and management actions designed to promote the functioning of San Francisco’s native ecosystem, including the maintenance of native biodiversity;

(2) provide passive recreational uses and a recreational trail system compatible with the city's natural resources; and (3) provide guidelines for educational, research, and stewardship programs. The Natural Areas are diverse, rather than narrowly focused on one particular habitat type; they support an array of native habitats and species, some found nowhere else in the world, such as the San Francisco garter snake and the Mission blue butterfly. The opportunity exists in these areas to protect and restore a wide range of sensitive species and natural habitats. Further, SNRAMP Section 2.1 indicates that the project seeks to re-establish native community diversity, structure, and ecosystem function, which also requires a range of habitats, rather than the conversion of one habitat to another.

One of the commenters states that California butterfly fauna are dependent on exotic species. While the Mission blue butterfly may be able to live in habitats that primarily consist of invasive species, the Mission blue prefer a host plant and appropriate nectar plants in a native coastal grassland habitat. The host plants utilized by the Mission blue are silver lupine (*Lupinus albifrons*), summer lupine (*Lupinus formosus*), and varicolor lupine (*Lupinus variicolor*). Nectar plants include various composites (*Asteraceae*) that grow in association with the lupines.

As mentioned in Response HY-1, p. 4-486, the SNRAMP is a 20-year management plan for the Natural Areas, and, as such, the proposed activities would not occur all at once; rather, the SNRAMP sets forth a management framework that the SFRPD would work towards in the 20-year lifetime of the management plan. With respect to the removal of trees in Sharp Park, and as presented in Table 5 on Draft EIR p. 114, approximately 15,000 of the 54,000 existing eucalyptus trees would be removed from select areas during the 20-year lifetime of the SNRAMP to restore native scrub habitats. Thus, trees would be removed in the Natural Areas over a 20-year period of time, and not all at one time.

Refer also to Response PD-11, RTC p. 4-159 for a discussion of the SNRAMP's goal of restoring native habitats in order to increase biodiversity. With respect to the scientific review of the 2005 Draft SNRAMP, refer to Response G-3, RTC p. 4-19. Refer also to Response G-19, RTC p. 4-88, for a discussion of potential impacts to dogs as a result of reducing DPAs.

Otherwise, the comments expresses opposition to the habitat restoration proposals and the habitat restoration theme that underlies much of the SNRAMP project, including the effects of restoration on carbon balance (stating that urban forests sequester carbon). Refer to Response GG-1, p. 4-297, for a discussion of the effects of the conversion of land covered by trees to grasslands (i.e., carbon storage and carbon sequestration as compared to loss of carbon) on climate change and global warming.

Comments on the merits of the project have been forwarded to the SFRPD staff and Commission for their consideration.

Comment PD-5 Native plant restoration versus providing more recreational areas

The response to Comment PD-5 addresses all or part of the following individual comments:

Bowman-1-09

PH-Antonini-03

- The EIR does not address the precedence of prioritizing native plant restoration over recreation and increasing green space. The opportunity cost of these plans is not evaluated.

This plan prioritizes unsustainable native plant restoration over humans. While native plants do provide recreation for people that enjoy gardening in the parks and has value in preserving special status plants and wildlife, the scale of this program is overwhelming for the benefits. More than 1/3 of the little parklands in SF cannot become like a museum, not to be touched by anyone but a select few. Fortunately or unfortunately, SF has little open space and dense housing, and there is little likelihood of changing that. In some ways, it is good that people stack into a small housing area and then share open space instead of spreading out and taking up more open space in suburbs.

In addition, the plan does not address areas such as Bernal Hill that has little green year around, and this plan is unlikely to result in the addition of aesthetically pleasing trees that would add to the character and charm of the park. Predominately brown native grass and even attempts to establish native trees are unlikely to significantly improve the aesthetic beauty of the park as non-native trees would. This plans prevents beautifying these parks for the community.

The plan also does not account for the expansion of endangered species and that can permanently remove land from ever being available for other purposes in the future. From what I understand, endangered status is not just related to the actual population of a species but also the number of sites. SF has no control on expanding sites so even if a species flourishes in these SF sites; the species are unlikely to be removed from the endangered species list. For example, the California Red Legged is common on the coast; it is the populations in the Sierras that are an issue. No matter how well the frogs do in SF city parks, the frog is unlikely to be taken off the endangered list. [Bowman-1-09]

- You know, people talk about dog walking areas. People talk about recreational areas. We have a big shortage of playing fields and other things and these are things that we need to really look into. [PH-Antonini-03]

Response PD-5

These comments express the opinions that the project prioritizes native plant restoration over recreation and green space; that the expansion of endangered species could result in land that is not available for other purposes in the future; and that there are a shortage of playing fields.

Refer to Response PD-3, RTC p. 4-132 for a discussion of how the project balances the needs for native plant restoration and continued recreational opportunities. Further, the Draft EIR analyzes the project, as proposed, which includes a balance of native plant restoration and recreational

improvements. As further discussed in Response G-4, RTC p. 4-29, CEQA and the CEQA Guidelines do not require an economic analysis of the project, such as the opportunity costs of implementing a proposed project (14 CCR 15131).

Refer to Response PD-11, RTC p. 4-159, for a discussion of the importance of re-establishing native habitats to improve biodiversity, and refer to Response G-19, RTC p. 4-88, and Response RE-13, RTC p. 4-347, for a discussion of the amount of parkland available in the city, both now and after implementation of the SNRAMP.

The SNRAMP does address Bernal Hill, in which it is primarily categorized as annual grassland (see SNRAMP Figure 6.21-3) and is dominated by slender wild oat (*Avena barbata*), wild oat (*Avena fatua*), Italian ryegrass (*Lolium multiflorum*), foxtail barley (*Hordeum murinum*), ripgut brome (*Bromus diandrus*), rattlesnake grass (*Briza maxima*), and annual fescue (*Vulpia bromoides*, *V. myuros*). These grasses, which appear brown in color during certain periods of the year, were introduced from Europe by various human activities and have displaced much of the native bunchgrass vegetation.⁴² No trees are proposed for removal on Bernal Hill. The objectives of the SNRAMP are generally to promote the functioning of San Francisco's native ecosystem and to provide guidelines for passive recreational uses compatible with the city's natural resources, as well as educational, research, and stewardship programs; none of the objectives address aesthetic resources.

The SNRAMP seeks to improve biodiversity and habitats for sensitive plants and animals. The success of the SNRAMP would not affect the availability of land for other purposes in the future because it is not SFRPD's goal, purpose, or allowed authority to develop land for any purposes other than natural and recreational areas. Further, the extent to which the outcome of the SNRAMP would, or would not, affect the listing of an endangered species is speculative to consider at this time.

Comment PD-6	Opposition to the proposed public access restrictions
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The response to Comment PD-6 addresses all or part of the following individual comments:

Betcher-1-01	Borden-1-01	Browne-1-04
Chirico-1-01	Enzi-1-01	Pruitt-1-01
Shepard-J-1-02	Smith-1-01	Valente-1-07

- I am particularly concerned that present off-leash areas available for people with dogs in San Francisco will be even more limited than they are already. For better or worse, the animal species that can continue to co-habit our planet with people are increasingly limited. For the vast majority of people who live in our urban areas, shared living experiences with dogs or cats are the only contact we have left with our fellow creatures. Dogs need to have at least

⁴² California Native Plant Society (CNPS), Policy on invasive exotic plants, 1996. This document is available online at: www.cnps.org/archives/exotics.pdf, accessed on June 7, 2016.

some time every day when they can run free, and people need to accompany them. There's of course a down side to everything, including children playing in parks and playgrounds, disturbing others and sometimes damaging the environment a little, but we know that such activities are essential to the health, happiness and well-being of our children. We have to consider that, in the case of dogs and dog-owners, urban dwellers really have no alternatives to the parks and beaches. It is unfair and unkind to take that away. Please leave the off-leash dog areas intact.

Thank you for your consideration. [Betcher-1-01]

- The existing NAP and the possible expansion of the Program to the Maximum Restoration Alternative would be harmful for the vast majority of San Franciscans. We need better access to the outdoors, not less. Under those alternatives, we would see more trail closures, roped off areas and herbicide spraying, reducing the access to wild areas we enjoy today.

The Proposed Project and Maximum Restoration alternatives go too far.

Those plans focus too much on trying to keep people out of the Natural Areas by removing the attractions that draw them there. There are three manifestations to this, closing popular social trails, trying to prohibit bicyclists from using the trails, and making the areas off limits to people walking dogs off-leash. I strongly disagree with the first two. As for dogs, they are destructive when walkers allow them to dig up the ground and it is all too common to find plastic bags of dog poop left trailside. [Borden-1-01]

- This report is another misguided attempt at “improving” or “saving” an area that needs no improvement, let alone saving. It may need some management, but not based on this report and not by this group of “experts”. We are a small SF community that is doing just fine preserving this beautiful hill. I don’t appreciate my tax dollars being wasted on this study and it’s recommendations to remove large areas of land from public use. Remember, this is an urban environment and we need to find sound, balanced solutions that fit. [Browne-1-04]
- I am writing to oppose the planned takeover of more city park space by the natural area program. As a San Francisco resident, tax payer, small business owner, and dog owner, I strongly feel that the public parks best served by having public access to people, including the dog owners.

I have volunteered many hours working with the Rec and Park personel for conservation. The NAP already has that the needed manpower can maintain. [Chirico-1-01]

- As a citizen who has chosen to live IN A CITY, I have no wish to have my access to public parks taken away from me.

The Natural Areas Program is a deluded, nonfunded attempt to privatize public parks which are funded through public money. [Enzi-1-01]

- I’m writing to oppose the SF Recreation and Parks Department’s plans to destroy 18,000+ trees and reintroduce “native” and endangered small plants in their stead. This plan would limit the SF humans’ and their pets’ access to the parks we pay tax dollars to RECREATE within. San Francisco prides itself (up to now) for having one of the highest population of

dog owners/guardians of any city and it was exactly the welcoming attitude of the city and its parks to pets that attracted us to rent then buy in San Francisco. If the parks become less accessible, then San Francisco becomes a less attractive place to live and recreate. [Pruitt-1-01]

- My biggest concern is what was intended to preserve the few remnants of San Francisco's historical habitat has changed into an ever-expanding program that controls over 25% of our City's parkland and with more areas being closed to the public all the time.

We live at the foot of Mt. Davidson. NAP is closing the trails, fencing off all the views, removing the benches we sit on, cutting down thousands of healthy trees, using poisons to sustain these native plant gardens, and actively ENCOURAGING POISON OAK!!! Where are we supposed to recreate?

What is wrong with this City? We are planning for higher density but taking away parkland where people recreate? NAP calls for "passive recreation". Just how is that supposed to remedy the obesity in this country? [Shepard-J-1-02]

- I appreciate the beauty of native plants and the history behind showing what vegetation grew before the city was here. Also, they make sense for saving water. But please do not close off any more land in San Francisco for this purpose – I think we have enough areas set aside already. [Smith-1-01]
- NAP diminishes necessary access to parks for recreational opportunity so important for our families. This City has already forfeited a significant amount of recreational parkland to the GGNRA. Much of this land has been converted from its originally intended recreational purpose to off-limits habitats. Now we are looking at losing an additional one third of our SFRPD parks to natural areas. In this densely populated metropolis, where are we supposed to go for recreation? As the old Cat Stevens ballad asks, "Where will the children play?" We can utilize off-leash recreation as an example of the loss of legitimate recreational use. Currently, there are as many or more dogs in the City of San Francisco as there are children. Additionally, the City of San Francisco enacted a law in 2005 that requires dog guardians to provide their dogs with adequate exercise. The ordinance states: "Adequate exercise means the opportunity for the animal to move sufficiently to maintain normal muscle tone and mass for the age, size and condition of the animal." Clearly for many of the medium to large size breeds, this can only be accomplished by off-leash recreation. Even a simple game of "fetch", the most basic of activities humans engage in with their dogs, cannot be played unless the dog is off-leash. Yellow Labrador retrievers are a very popular breed of dog in the City, yet they are genetically predisposed to being overweight. These dogs require a good deal of off-leash running exercise as well as some swimming in order to maintain an acceptable, healthy weight. Furthermore, there are some breeds of dogs which require swimming as a primary form of exercise. If they are exercised primarily on grass, pavement or the ground, they develop arthritis at an extremely young age. One example of this would be the Newfoundland – a dog bred primarily for water rescue. This NAP program not only reduces the available area for off-leash recreation at a time when the number of dogs is ever-increasing, it also eliminates all areas where dogs are legally allowed to swim. One of the

Commissioners pointed this out to Lisa Wayne at a meeting, and asked if NAP had considered alternative areas for swimming since they planned to eliminate the current areas, and she merely replied, "No". This is not indicative of an attitude which seeks to fulfill the legitimate recreational needs of perhaps the largest "special interest" recreational group in the City-dog guardians. This attitude puts guardians at substantial risk of violating their legal duties and is unconscionable. This NAP cannot be approved without modifications which would increase the available area for off-leash recreation beyond what it is now, as well as designate specified areas for dogs to swim. Anything less would subject the City of San Francisco to litigation; the City has enacted an ordinance placing requirements upon dog guardians, acknowledged in same ordinance it is expected public property will be utilized to fulfill these requirements, and subsequently systematically removed the ability to fulfill these requirements by eliminating access to public property for that use. These actions are clearly discriminatory, and will serve to inflame the dog guardian community. Litigation over this issue would be inevitable and costly. Monies would be better spent fulfilling the City's obvious responsibilities to the recreational needs of the public in order to avoid litigation entirely. NAP plans call for the immediate closure of about 15% of the legal off-leash space (Dog Play Areas, or DPAs) in San Francisco city parks – the complete closure of the DPA at Lake Merced and reductions in the DPAs at McLaren Park and Bernal Hill. NAP says that dogs "may" impact the plants in natural areas, and therefore the closures are needed. The NAP refers to dogs as "nuisances". NAP offers no proof, however, that any impacts actually occur or ever have occurred. Hard, scientifically rigorous proof must be provided if NAP is to kick people out of areas they have enjoyed for years. The way it's set up now, NAP can take areas that have been legally off-leash for decades and, with the stroke of a NAP staffer's pen (and no real proof), the off-leash is gone. NAP could close up to 80% of the legal off-leash space in SF city parks [Valente-1-07]

Response PD-6

These comments express opposition to access restrictions in San Francisco parkland. The proposed project is a management plan for the current program area and does not create new Natural Areas or restrict public access to the existing Natural Areas, but instead focuses on enhancing native communities within existing Natural Areas. In fact, one of the stated goals of the SNRAMP, as identified on p. 2-2 of the SNRAMP, is "To improve and develop a recreational trail system that provides the greatest amount of accessibility while still protecting natural resources." For a more detailed response regarding recreational access opportunities under the SNRAMP, refer to Response RE-8 and Response G-5, RTC pp. 4-324 and 4-31, respectively. As further discussed in Response LU-2, RTC p. 4-214, although some access points or social trails would be removed, the SNRAMP would maintain public access to all Natural Areas.

In terms of bicycle use, bicycles are currently allowed on paved areas in some of the Natural Areas (if trails are designated accordingly), such as Balboa Park, Bernal Hill, Buena Vista Park, Glen Canyon, Lake Merced, McLaren Park, Pine Lake, and Twin Peaks. Further, since the SNRAMP Draft EIR was written and circulated for public review, four multi-use trails (which includes bicycle use)

have been added in the Natural Areas (two in the Interior Greenbelt, one in the Oak Woodlands of Golden Gate Park, and one in McLaren Park). The SNRAMP does not propose changes to bicycle use in the Natural Areas.

With respect to recreational impacts caused by the closure and reduction in size of a total of three DPAs, the EIR concludes that the proposed closure and reduction of the DPAs would not result in significant impacts to recreational resources (Impact RE-1 on Draft EIR pp. 256 to 258 and Impact RE-4 on pp. 258 to 259). On-leash dogs would continue to be allowed access to all Natural Areas and significant acreage would also be available for off-leash dog recreation. However, when combined with impacts resulting from the GGNRA Dog Management Plan, the EIR conservatively determines that the cumulative impact of these two projects could accelerate the physical deterioration of those DPAs and the Natural Areas in general (Impact RE-7 on Draft EIR pp. 261 to 262; Impact RE-7 was further clarified and expanded in Response RE-2, RTC p. 4-313). With respect to increased use of the Natural Areas by visitors, the EIR finds impacts to recreational resources to be less than significant (Impact RE-1, beginning on p. 256, Impact RE-4, beginning on p. 259, and Impact RE-7, beginning on p. 261).

Refer to Response G-19, RTC p. 4-88, and Response RE-13, RTC p. 4-347, for a detailed discussion of on-leash and off-leash dog use opportunities throughout the city. Further, the SNRAMP does not eliminate all areas where dogs are legally allowed to swim. Unless posted otherwise, dogs are allowed to swim in water features provided in public parks. As part of the SNRAMP, and as stated on SNRAMP p. 5-11, specific access to the water would be restricted at Pine Lake. This is a small lake and wetland (1.7 acres) used by migratory and resident wildlife. Access to the water would also be restricted to a portion of Gray Fox Creek (in McLaren Park), as stated on Draft EIR p. 139.

Refer also to Response G-26, RTC p. 4-114, for a response to comments regarding a bias against dogs.

Comment PD-7	Opposition to reduction of Bernal Hill dog play area
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The response to Comment PD-7 addresses all or part of the following individual comments:

Caskey-1-01

Huebsch-1-01

Ilig-1-01

Johnson-1-01

Muniz-1-01

RileyHoppes-1-01

- Closure or restriction of our dog parks, specifically Bernal Hill, would be devastating to the Bernal community.

We are responsible dog owners, and want to express our *earnest* desire to maintain access to Bernal Hill, and all other existing DPAs with our dogs. [Caskey-1-01]

- I am a resident of Bernal Heights. I frequently take my dog to run on the Bernal Hill. My dog does not dig or disturb the natural environment. I would be terribly sad and upset if this area was closed to dogs. My upset and sadness would be for several reasons. There needs to be open space for dogs in San Francisco. The neighborhood (dog owners and non-dog owners)

use the Bernal Hill park a great deal. The habitat that exists is “natural” and supports the current use. GGNRA and SF Parks focus on habitat restoration is wrong. Given the limited budgets that all government agencies must live with, it seems wrong to expend funds on unneeded habitat restoration. Better use of the funds would be on general park restoration. Precita Park and Holly Park are great examples for using funds to restore parks. The result is that neighbors use the parks and feel a greater alliance to their neighborhoods, making them safer and more livable for all. [Huebsch-1-01]

- I strongly object to the closure of any part of Bernal Hill to off-leash dog recreation. I have owned a home in North Bernal Heights for 17 years and I am up this hill with my dog at least once a day. This hill is a unique urban park that is shared by hundreds of neighbors with and without dogs every day, and the natural areas have not been affected by the recreational use of these SF residents. I disagree with the findings of the EIR regarding this park and I urge the Planning Commission to reject any plans to restrict or close areas to recreational use by residents and their companion animals. [Illig-1-01]
- I am writing to express my alarm that the SF Recreation and Parks Department may eliminate large swaths of off-leash dog play areas in city parks. I am particularly alarmed at plans to restrict off-leash activity in Bernal Hill Park -- a beautiful space that I have lived next to and used daily for 12 years.

Bernal Hill without off-leash dogs will lose most of the “eyes and ears” the dog-walking community provides – the eyes and ears that keep it a safe and clean place for recreation. What is now a vibrant park could very well turn into a meeting spot for vandals, petty hoodlums, and homeless encampments.

Why on earth, in these constrained budgetary times, would RPD divert resources from its other critical programming to implement unpopular, unwanted restrictions on off-leash dog recreation? I object to the policy of restricting dog play areas, on the merits, regardless of RPD’s fiscal situation. But when I consider the opportunity costs involved in RPD taking this on, I am truly shocked. What programs will RPD sacrifice in order to ruin Bernal Hill Park for me and my family, and thousands of other law-abiding recreational users? [Johnson-1-01]

- I am opposed to the closure of the DPA on Bernal Hill. I don’t own a dog, but I love walking on the hill and meeting friend and fellow Bernal residents that do have dogs. The Bernal DPA is a safe and beautiful place to bring dogs and it must be protected. Kids, dogs, residents-young and old, all mixing together. It’s refreshing to see such activity in the middle of an urban area. If the Bernal DPA is reduced in size as purposed, there will be no space for all of this activity. Dogs and their guardians will have no choice but to walk the concrete surfaces in our neighborhood and a years-long tradition of meeting on the hill will be gone. The Bernal DPA is our urban public space! Please don’t isolate members of our community by closing this area. Keep the Bernal DPA open and free for all to enjoy. Please do not reduce the size of this DPA. Our community needs every inch of this space. [Muniz-1-01]
- Dear Bill - I’m a 17-year San Francisco resident, and for the last 8 years, I’ve lived in Bernal Heights. My dog and I enjoy Bernal Hill daily, and we frequent many other city parks. Dog owners are some of the most responsible citizens in our city. We clean up after ourselves and

our dogs, and we take time via cleanup days to catch those few piles that we may have missed. We respect our community and our parks and cherish them more than any other San Francisco citizens. It's not a good use of police time to chase after and ticket dog owners. There are far more significant issues to take up police and park service time, money and energy. Of all of my political representatives, Supervisor Campos is the only one who never responds to emails with significant issues. Nonetheless, I'm copying him in here. It may sound cliché, but I have a dog, I'm active in my community, and I vote. The policy you propose is unreasonable, unenforceable, poorly conceived and not in the interests of the majority of San Franciscans. Thank you for your consideration. [RileyHoppes-1-01]

Response PD-7

These comments express opposition to modifications to the Bernal Hill DPA.

The portion of the Bernal Hill DPA proposed for conversion to on-leash use contains sensitive MA-1 habitat areas located on steep slopes, some of which are inaccessible due to their steepness (refer to Recommended Management Action BH-3a on Draft EIR p. 118). The MA-1 areas are designated as such due to the presence of several sensitive plant species and native grassland on the steep north side of the hill (primarily, the shooting star, common muilla, and the star lily). Off-leash dog use in areas with steep slopes can cause soil to be dislodged by dogs running up and down the hill and digging, thereby undermining the sensitive species and habitat in these areas and contributing to erosion.

The soils in the steepest portions of Bernal Hill are highly susceptible to erosion from wind, rain, and trampling. The effects of wind and rain are increased when trampling removes vegetation and disturbs the soils. When other factors are equal, the severity of erosion is directly related to the level of uncontrolled public use, including the creation of social trails. The greater the uncontrolled use of the site, the more severe the erosion of the steep hillsides. By converting these steep areas to on-leash/on-trail areas, erosion caused by dog and human use can be prevented or reduced.

The SNRAMP does not propose to prohibit dogs on Bernal Heights Park. Instead, it proposes to reduce off-leash areas by six acres, maintaining 15 acres of the 21-acre site as accessible to off-leash use. Of these six acres, approximately 2.5 acres are largely inaccessible due to slopes between 45 and 90 degrees. Therefore, the accessible acreage of current off-leash areas that would be converted to on-leash/on-trail use (to prevent further erosion and the loss of sensitive plant species and habitats) is 3.5 acres. Dogs and people would still be able to experience the trails, views, and wildflowers in these areas, but would be required to remain on-trail.

The remaining off-leash portions of the DPA would be limited to the flat and less-steep areas on and around Bernal Hill. These relatively flat areas are currently the most heavily used off-leash areas and are most suitable for the run-around use associated with DPAs. The off-leash areas that would remain include (1) the quarry at the southwestern portion of the park; (2) the quarry at the eastern

end of the park; (3) the closed portion of Bernal Heights Boulevard; and (4) the terrace on top of the hill east of the radio tower. The off-leash trail loop, linking all of these off-leash areas, would remain.

Refer to Response RE-10, RTC p. 4-337, for a discussion of access to parks after implementation of the SNRAMP.

Comments about the relative merits of the proposed project will be considered by the decision makers as part of their decision to approve, modify, or disapprove the proposed project. That consideration is carried out independent of the environmental review process.

Comment PD-8	Opposition to reduction of McLaren Park dog play area
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The response to Comment PD-8 addresses all or part of the following individual comment:

Loeffler-1-01

- I am all for respecting natural areas of the parks, but to take more space away from people trying to recreate themselves and their dogs, does not make sense, especially in this tight financial climate, where people are looking for economical ways to recreate. Putting a well socialized dog on a leash will often make them more aggressive. There are more dogs than children in San Francisco. Dogs need to play, not be held on a leash.

McLaren Park is a Natural park. We who walk here, love it and come here because we love it AND because we have a dog that can RUN FREE. I would bet that most parks are used mostly by dog walkers. I can tell you that, I walk every day, and most of the people I see walking, have a dog with them. That is the largest percentage of people who use the parks.

McLaren Park is full of dog owners and dogs- please do not take away dog walking areas and do not make more stringent laws about putting dogs on leashes in more areas.
[Loeffler-1-01]

Response PD-8

This comment expresses opposition to the proposed project, specifically modifications to the McLaren Park DPA.

The portion of the McLaren Park DPA to be converted to on-leash use includes the Gray Fox Creek area, which is considered a sensitive natural community because it offers one of the few creek riparian habitats with aboveground water available for wildlife, and the willow trees and surrounding scrub, which provide needed habitat for the California quail (refer to Recommended Management Action MP-9a on Draft EIR p. 139). The SNRAMP proposes to eliminate dog access to a 0.6-acre portion of Gray Fox Creek and to convert a 7.7-acre area around the creek to an on-leash on-trail use area to protect sensitive habitat. This would affect a total of 8.3 acres of the 61.7-acre Natural Area.

4.B.3 SNRAMP Goals

Comment PD-9 Decommissioning of trails

The response to Comment PD-9 addresses all or part of the following individual comment:

Bowman-2-01

- 1. Correct the distances for Existing Trails and To Close/Relocate Trails

1.1 Need to correct Existing and Resulting Trail Distances in Table 5: Summary of Natural Areas Management Plan

The following inaccuracies were observed in the trail distances in Table 5:

1. The 2008 Park Bond Trail Restoration Program (Bond Trail Restoration) for Billy Goat Hill and Twin Peaks demonstrates RPD's intentions for decommissioning trails based on the SNRAMP and this intent far exceeds the feet of trails designated in Table 5. *Attachment B* includes some of the project documents illustrating the decommissioning of trails.
2. It is likely that the street roads and sidewalks were included in the trails distances designated in Table 5 since the existing and remaining trails distances are much greater than the trails depicted on the DEIR trail maps for Twin Peaks and Billy Goat Hill DEIR maps. Including city streets and sidewalks is not appropriate because they are not maintained by RPD and/or are not Natural Area's trails.
3. The McLaren proposed plan also includes creating habitat for the endangered Mission Blue Butterfly, which based on the Final Bond Trail Restoration Twin Peaks conceptual trail design (<http://sfrpd.org/wp-dev/wp-content/uploads/Twin-PeaksTrail-concept-plan.pdf>), results in closing even primary trails. Also, the Interior Greenbelt trail is missing from the SNRAMP map of existing trails and should be added to the map and the existing trail feet in Table 5.

These inaccuracies indicate that Rec & Park must reevaluate and restate the trail distances for all sites represented in the Table 5 for the revised DEIR to ensure that:

- 1) The distances reflect the most likely SNRAMP plans for decommissioning existing secondary trails (aka social trails) and primary trails based on the actual trail projects already completed or designed for the Natural Areas. For example, Billy Goat Hill, Twin Peaks, Glen Canyon, and McLaren all contain(ed) significant secondary trails (aka social trails) than are represented in Table 5 and Twin Peaks and McLaren contain primary trails crossing planned endangered species restoration zones.
- 2) Trail distances are only for actual Natural Areas' foot trails and not city streets and sidewalks, particularly those not maintained by the Natural Areas or even RPD.

Additional Notes:

The Bond Trail Restoration projects represent the most conclusive evidence of RPD's intentions regarding decommission trails and erecting fencing based on the SNRAMP. While

I do not have the professional tools necessary to measure the trail distances on the Bond Trail Program or the DEIR maps with complete accuracy, the rough measurements demonstrate that the numbers represented in the DEIR Table 5 are significantly different both in percentage and overall distance for both Billy Goat Hill and Twin Peaks and represent a far greater impact on recreation than currently is represented in Table 5. Below is a rough analysis based on using string and a ruler to measure the trail distances that is purely to illustrate the need for RPD to reevaluate and correct the values presented in Table 5.

2008 Bond Trail Restoration Project	Rough Trail Feet Estimate****				DEIR Draft Table 5 Trail Feet			
	After Trail Project	Existing	Decommissioned by Trail Project	%	After Trail Project	Existing	Decommissioned by Trail Project	%
Billy Goat Hill *	688	1912	1224	64%	1855	2600	745	29%
Grand View **	1471	1853	382	21%	1313	1722	409	24%
Twin Peaks ***	2718	8050	5332	66%	6939	8741	1802	21%
* The estimated feet of authorized trails after the trail restoration is per the map in the Billy Goat Hill Trail Enhancement And Restoration Project - SCOPE OF WORK for Yerba Buena Construction. The estimate of the original trails is based on the trail depictions on the Scope of Work map and the trails depicted on the Draft DEIR FIGURE 6.9 - 4 MANAGEMENT AREAS AND TRAIL PLAN BILLY GOAT HILL. Note there is a significant difference in the trail feet between the estimate and the DEIR draft which may be represented by the city street that runs beside the park and that isn't appropriate to include as a Natural Areas' trails.								
** The estimated feet of authorized trails after the trail restoration is per the map in the Grand View Trail Enhancement And Restoration Project - SCOPE OF WORK for Yerba Buena Construction. The estimate of the original trails is based on the trail depictions on the Scope of Work map and the trails depicted on the Draft DEIR FIGURE 6.5 - 17 MANAGEMENT AREAS AND TRAIL PLAN GRAND VIEW.								
*** The estimated feet of authorized trails after the trail restoration is the Final Twin Peaks Conceptual Project Plan. The estimate of the original trails is based on the trail depictions on the conceptual plan and the trails depicted on the Draft DEIR FIGURE 6.8 - 5 MANAGEMENT AREAS AND TRAIL PLAN TWIN PEAKS. Note that DEIR draft likely included the non-RPD road as a trail, which was not included in the rough estimates as it is not a NAP trail.								
**** These estimates are rough estimates based on the use a string and ruler technique to measure the distances and calculate using the scales provided on the map. These only provide a general assessment of the trail distances.								

Table 5 also likely understates the trails to be decommissioned for other Natural Areas based on the actual history of the Natural Areas Programs and the Bond Trail Program, which is the best evidence of RPD's intentions. Based on the Bond Trail Program projects, one must project that NAP intends to decommission almost all secondary trails (aka social trails) plus some primary trails that cross the MA-1 zones or proposed endangered species reintroduction areas. For example, the primary trails at McLaren are approximately 3 miles, which is far less than the more than 8 miles stated in Table 5 for trails to remain. Even though much of MA-1e doesn't even contain the lupine host plants for the Mission Blue, the proposed plan is to "augment the Mission Blue Butterfly Habitat" and "monitor" and "install fencing" in the extensive MA-1e zone, which is predominated by non-native oat grassland. Based the strategy for decommissioning primary trails illustrated by the final Twin Peaks design, the distances for several of the McLaren MA-1e primary trails must be included in the trails designated to be decommissioned in Table 5. [Bowman-2-01]

Response PD-9

This comment questions the existing and proposed trail distances provided in Table 5 and whether or to what extent the Bond Trail Restoration has decommissioned trails.

As mentioned in Response G-3, RTC p. 4-19, the projects identified in the 2008 and 2012 Clean and Safe Neighborhood Parks Bond are separate and independent from the SNRAMP; however, in the case of the 2012 Clean and Safe Neighborhood Parks Bond, some of the money is set aside for citywide parks improvements. It is possible that some of these monies could be used for management actions and improvements proposed under the SNRAMP, but no physical improvements could be accomplished unless and until the SNRAMP is adopted and this EIR is certified by the Planning Commission.

The trail lengths presented in Table 5 of the Draft EIR refer only to designated primary, secondary, and social trails; it does not include streets or sidewalks. Further, the data contained in Table 5, including the length of the trails, was generated using a Geographic Information System (GIS), which also produced the Soils, Land Features, and Trails maps contained in the SNRAMP. GIS is a sophisticated computer system used for capturing, storing, checking, and displaying data related to positions on the Earth's surface. Each of the individual Natural Areas maps provided in the SNRAMP indicates the source data used in the GIS map and who created and revised the GIS map and on what date. The information provided in Table 5, and on the maps provided in the SNRAMP, represent the existing conditions at the time work on this EIR commenced.

As mentioned in Response RE-10, RTC p. 4-337, Impact RE-1, Draft EIR pp. 256 to 257, addresses the potential effects of trail closures on recreational resources and access. Of a total of 211,303 feet (or 40 miles) of trails, the SNRAMP calls for closing approximately 54,400 feet (10.3 miles) of social trails, creating 5,897 feet (1.1 miles) of new trails and improving existing, primary trails to provide a more manageable trail system with greater access and easier navigation through the parks. Social trails are trails that have not been officially designated and are usually created by users, while primary trails are those officially designated as main routes into and around a Natural Area. Trail closures would focus primarily on eliminating social trails because they are considered unsafe, to protect sensitive species or habitat, or to prevent soil erosion.

The commenter states that the DEIR does not correctly represent the scale of the impact on recreation that could result from the decommissioning of social trails because the SNRAMP illustrates fewer trails to be decommissioned than are illustrated on the concept plans for trail restoration projects at Billy Goat Hill and Twin Peaks. Social trails are not developed by SFRPD; instead, they result from unauthorized travel by park users and change over time as unauthorized use changes over time. As such, it is impossible for the department to maintain an inventory of all social trails. The SNRAMP identified anticipated social trails to be decommissioned, as well as improvements to authorized trails. When the SFRPD develops trail restoration plans for specific projects, a current survey is conducted to develop a trail restoration plan that reflects the most up-to-date information about social trails and the preferred alignment for authorized trails. For this reason, the Primary, Secondary, and Closed trails illustrated in the SNRAMP are similar to, but not necessarily identical to, the New and Decommissioned trails illustrated in the trail restoration projects.

The Draft EIR determines that closure of social trails, unsafe trails and trails located in sensitive habitat areas is not expected to have a significant adverse impact on recreational resources because general access would remain unimpeded; the creation of new trails and the maintenance and improvement of existing primary trails under the SNRAMP would provide a more manageable trail system with greater access and easier navigation through the parks; and these improvements may incrementally increase visitor use by improving access to the parks for more types of users.

In terms of the cumulative impacts related to the reduction in trails, which includes social trails, Draft EIR p. 263 stated that:

“as a part of the SFRPD Trails Program, trails would be improved with SFRPD and/or grant-funded capital projects. Trail improvement in areas surrounding the 32 Natural Areas would dissipate recreation users throughout the trail system and overall would enhance the experience of passive recreation users, resulting in a beneficial and less than significant cumulative impact on recreational facilities.”

Comment PD-10 Goals and objectives of the proposed project
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The response to Comment PD-10 addresses all or part of the following individual comments:

GGAS-1-03

MPIC-2-07

MPIC-2-18

WEI-1-02

- Overall, Golden Gate Audubon endorses the objectives as set forth in the DEIR. However, we would amend the second-to-last objective to read (new text in underline):

- To provide guidelines for education, research, ~~and~~ stewardship programs, and outreach to inform community members about the value and importance of natural areas within San Francisco; and

We see “stewardship” and “education” as being somewhat more narrow than broader outreach to the community. Alternately, similar language could be inserted under the “Education” or “Stewardship” sections of Section III.E.1 *Objectives and Goals of the SNRAMP*. (DEIR, at 85, 86). [GGAS-1-03]

- In conclusion, the goals and current scope of the SNRAMP project for Mt. Davidson are incompatible with, degrade, and subordinate the goals and needs of those who live next to and use this important San Francisco park and recreation resource. The following SNRAMP proposals would all have significant negative environmental impacts for the residents of Miraloma Park: concentrated removal of 1600 trees; closure of 2,900 feet of unidentified trails; limitation of dog access to nearly six acres of the park; continued use of hazardous herbicides; prohibition of recreational amenities as defined by the Park Maintenance Standards developed to implement Proposition C in 2003; leaving maimed trees and trim waste in the park; disregard and degradation of the forest’s historic and cultural value; and the failure to develop a vigorous reforestation plan for the MA-3 zones (with the same species). While the SNRAMP is described as a community-based program, the DEIR does not

describe any meaningful way for residents to modify this plan once it is approved. [MPIC-2-07]

- The DEIR notes that Mt. Davidson Park has high recreational value and trail use by the citizens of San Francisco. The park was originally created for recreational purposes. The SNRAMP proposal subordinates the recreational purposes for which the park was created to conservation and restoration goals, which is a significant change in the purpose of the park that will negatively impact park uses. [MPIC-2-18]
- **Neither the preferred alternative for Sharp Park, nor any of the alternatives assessed in the DEIR, meet the goals and objectives of the proposed project.**

The SNRAMP has precise goals and objectives. These include recreation goals such as providing “opportunities for passive recreation, such as hiking and nature observation, that are compatible with conservation and restoration goals; and [t]o improve and develop a recreation trail system that provides the greatest amount of accessibility while protecting natural resources.” Moreover, the SNRAMP conservation and restoration goals include:

- > To maintain and enhance native plant and animal communities;
- > To maintain and enhance local biodiversity;
- > To reestablish native community diversity, structure, and ecosystem function where degraded;
- > To improve Natural Area connectivity; and
- > To decrease the extent of invasive exotic species.

Yet the preferred alternative for Sharp Park fails to meet these goals and objectives, nor does it squarely fit in any other project goal or purpose. Instead, as defined it will maximize active recreation that threatens the natural areas at the expense of feasible alternatives that would meet the conservation and recovery goals. This is not consistent with the requirements of CEQA, and therefore the preferred alternative is not feasible – because it cannot meet the goals and objectives of the project.

On the other hand, a full restoration alternative as proposed in the ESA/PWA report attached to this comment would meet all of these project goals and objectives – and yet it was rejected as infeasible by the Department because it may have impacts on an historic resource. But the City has failed to apply the proper standard to this question (and as described below, its assertion of historical significance at Sharp Park is absolutely in error). Financially feasible alternatives that meet the goals and objectives of the project cannot be eliminated from environmental review and consideration – i.e., excluded from the alternatives assessment process – simply because they may have some unavoidable significant impacts. This is particularly true when those impacts can be mitigated.

Here, it is abundantly clear that the full restoration alternative proposed in the ESA/PWA report and provided to the City many months ago meets the criteria for consideration as an alternative in the DEIR. Moreover, the preferred alternative, also has unmitigatable impacts – and yet these very impacts were used to exclude the full restoration alternative for review.

This is inconsistent and not supportable by any standard or substantial evidence. For this reason, the CEQA document is flawed. [WEI-1-02]

Response PD-10

These comments question the stated goals and objectives of the SNRAMP, in some cases suggesting revisions, and in other cases questioning whether the project meets the goals stated.

The SNRAMP seeks to strike a balance between natural resource protection and the needs of citizens for active and passive recreational opportunities in a highly urbanized and densely populated environment. The SNRAMP is intended to guide the City's natural resource protection, habitat restoration, trail and access improvements, other capital projects, and maintenance over the next 20 years.

In terms of alternatives to the project that would maximize restoration activities, Draft EIR Section VIII, Alternatives, evaluated such an alternative (the Maximum Restoration Alternative), which addressed all of the Natural Areas including, Sharp Park. As stated on Draft EIR p. 480, this alternative would restore native habitat and convert nonnative habitat to native habitat wherever possible throughout the Natural Areas, including all management areas. The Maximum Restoration Alternative prioritizes activities related to endangered species protection and recovery, and maximum enhancement of biodiversity. Compared to the proposed project, this alternative emphasizes the restoration of native habitat over recreational uses and nonnative habitat.

In accordance with CEQA Guidelines Section 15126.6, "alternatives to the proposed project shall include those that could feasibly accomplish one or more of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects." The objectives of the project, in terms of CEQA, are the project objectives articulated in the EIR, which, in this case, include the following (refer to Draft EIR p. 82):

- To identify issues and impacts adversely affecting ecosystem functions and biological diversity;
- To identify, prioritize, and implement restoration and management actions designed to promote the functioning of San Francisco's native ecosystem, including the maintenance and enhancement of native biodiversity;
- To identify and prioritize monitoring of natural resources to support an adaptive Management approach;
- To provide guidelines for passive recreation compatible with San Francisco's natural resources;
- To provide guidelines for education, research, and stewardship programs; and
- To restore the Laguna Salada wetland complex for the benefit of special-status species.

According to CEQA Guidelines Section 15124, the CEQA project objectives are intended to describe the underlying purpose of the project, which will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and aid the decision-makers in preparing findings or a statement of overriding considerations. The SNRAMP goals, as opposed to the SNRAMP Draft EIR objectives, broadly focus on conservation and restoration, education, research, stewardship, recreation, monitoring, design and aesthetics, and safety (refer to SNRAMP pp. 2-1 and 2-2). The CEQA project objectives are more focused than the broader SNRAMP goals (and intended to guide the development of CEQA project objectives, as previously mentioned), but they are fundamentally consistent. With respect to Sharp Park, in particular, SNRAMP p. 6.4-9 describes the intended objectives of the site improvements at this location, which are even more focused (yet consistent with the CEQA project objectives and the SNRAMP goals) and include possible expanded public access to the upper canyon and linkages to neighboring open spaces; increased and more sustainable populations of sensitive plant species; enhanced habitats for California red-legged frog and San Francisco garter snake; restoration of coastal scrub and creek riparian habitat in the canyon; improved wildlife habitat; protection of sensitive habitats and species at Laguna Salada; creation of a buffer zone between the wetlands and the golf course fairways; reduction in erosion; and protection of endangered San Francisco garter snake and California red-legged frog habitat by restricting access to Horse Stable Pond, Laguna Salada, and Arrowhead Pond.

With respect to the Maximum Restoration Alternative, the Draft EIR concluded on p. 525 (Table 21) that impacts would be the same as the proposed project; but ultimately the Draft EIR found that the Maximum Restoration Alternative does not meet the objective related to recreation, as the Maximum Restoration Alternative would provide additional restrictions on public use and access of the Natural Areas, including further restrictions of DPAs (DEIR p. 481).

In terms of the ESA/PWA alternative to which the commenter refers, it was evaluated and rejected as infeasible. According to PRC Section 21061.1, feasibility, such as a feasible alternative, is one that is “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.” CEQA Guidelines Section 15126.6 specifically states that “[a]n EIR is not required to consider alternatives which are infeasible.”

Draft EIR p. 526 makes the following conclusion about the Maximum Restoration Alternative⁴³ that:

“During the scoping process, a public comment was received proposing a Sharp Park restoration alternative that included a model of natural flood control, outdoor recreation, environmental education, and endangered species recovery. This alternative would involve full restoration of the entire Sharp Park property, including the

⁴³ The ESA/PWA restoration alternative included a larger footprint than the Maximum Restoration Alternative, which was encompassed within the footprint of the ESA/PWA restoration alternative.

elimination of the golf course. This proposal was rejected as an individual alternative because it is not compatible with the 18-hole layout of the historic golf course. This alternative would, through the elimination of the Sharp Park Golf Course, result in greater significant and unavoidable impacts to cultural and recreational resources and therefore is not required to be analyzed under CEQA. In accordance with CEQA Guidelines Section 15126.6, "... alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects." In addition, an alternative that would convert the entire Sharp Park Natural Area would only address one of the many Natural Areas addressed by the SNRAMP and could not practicably be extrapolated to the other Natural Areas. While rejected as an individual alternative, components and approaches embodied by this proposal have been incorporated into the Maximum Restoration Alternative."

Golden Gate Audubon Society suggested a revision to one of the SNRAMP's objectives, which is provided on both SNRAMP p. 1-4 and Draft EIR p. 85. The objective is "to provide guidelines for education, research, and stewardship." Golden Gate Audubon stated that "stewardship" and "education" are narrower than broader outreach to the community. While the SFRPD does not elect to change the objective contained in both the SNRAMP and the Draft EIR, the concept of conducting outreach to inform community members about the value and importance of Natural Areas within San Francisco is fundamental in the work the SFRPD has undertaken in preparing the SNRAMP and Draft EIR (refer to Response G-3, RTC p. 4-19, and Response G-10, RTC p. 4-50 for a discussion of the extensive outreach efforts). Further, the SFRPD maintains a website devoted to sharing information about the Natural Areas (<http://sfrecpark.org/parks-open-spaces/natural-areas-program/>), and there are other opportunities for outreach, such as posting notices before and after pesticides are used and when trees are slated for removal or trails are expected to be closed. The SFRPD refers to the Natural Areas Program as "a community-based habitat restoration program," reflecting SFRPD's desire to engage the community in all aspects of implementation of the Natural Areas Program.

<p>Comment PD-11 Goals and implementation of the Natural Areas Program</p>
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The response to Comment PD-11 addresses all or part of the following individual comments:

WTPCC-1-12

Bowman-2-14

Shepard-A-1-01

- The fundamental goals of NAP are misaligned with what San Franciscans want in their parks. To date, NAP has focused on restoring open space in San Francisco to "native" status. The SNRAMP was written to interpret "Natural" to mean "Native." That's not what San Franciscans want their natural areas to be. We want Natural Areas to be:
 - > Accessible to the public
 - > Safe

- > Well-Maintained
- > Green and filled with growing things (trees and plants)

Nowhere on that list does it say “native only.”

People love Golden Gate Park (which is filled with non-native species), but it’s not always easy to get to – so they want miniature versions of Golden Gate Park in their neighborhoods. They want a variety of plants that look nice, and space that gives them a chance to escape where they can walk, run & play with their family, friends and pets. Purely native areas do not provide the same visual and recreational opportunities that our non-native areas do. That’s why people living in San Francisco more than 100 years ago introduced non-native species in the first place. Lush and green is what we want, and we’re not picky about whether it’s native or not.

The Natural Areas Plan should reflect that desire, and work to accommodate it. NAP can certainly preserve a small portion of the total parks space for native plants (much like the botanical gardens include sections that are native only), but only if these native areas can meet the requirements above (i.e. accessible, walkable, safe, well maintained and green and lush). In a densely populated urban area like San Francisco, native-only should be a “nice to have” that takes a back seat to priorities like accessible, safe and lush.

WTPCC asks the Planning Department to address the issues we identified with the Draft DEIR. We ask the Recreation and Park Commission to rethink its support for NAP. [WTPCC-1-12]

- Clarify in the DEIR that most of the “Natural Areas” are predominately non-native plants and trees and not remnant or sensitive habitat. Most of the Natural Areas are planted forests and old livestock pastures that SNRAMP plans to convert to native coastal dunes, scrub, and grassland to treat as conservation areas instead of recreational areas. The statement “The Natural Areas Program mission is to preserve, restore, and enhance the remnant Natural Areas and to promote environmental stewardship of these areas” is incomplete without incorporating the current land use and type of land.

Throughout the SNRAMP, it discuss that the Natural Areas are predominated by plants that are not native to SF, and the urban forests are almost exclusively non-native plants. RPD often makes the claim in the media and public presentations that the Natural Areas are remnant Natural Areas is misleading and does not provide the public with a clear understanding of the extend of the SNRAMP plans. [Bowman-2-14]

- NAP is fundamentally flawed and misses the point entirely. It is not what San Francisco wants or needs. We want accessible, attractive, safe, and well maintained parks and recreation areas. We need more services that attract and keep families in our city. NAP not only does not provide these vitally needed resources, it sucks funding away from them. Some of the contradictions caused by NAP facing the families in our neighborhood are illustrated by recent activities by RPD.

All playground directors were fired leaving a gap in children’s recreation in our city. RPD saw this as a money saving endeavor. We see it as a giving up of one of RPD’s most basic

functions. At the same time, RPD spends money on NAP, a program that serves very few people. Although the city department name begins with “recreation” they have apparently abandoned the requirement to provide that service. [Shepard-A-1-01]

Response PD-11

These comments question whether the goals of the NAP are aligned with what San Franciscans desire in their parks.

The NAP is the branch of SFRPD responsible for managing the City’s Natural Areas. The mission of the Program is two-fold: to preserve, restore, and enhance remnant Natural Areas and to develop and support community-based site stewardship of these areas. The initial impetus for the Program came from several local grassroots environmental organizations that recognized the value of the “Significant Natural Resource Areas” as plant and wildlife habitats, ecosystem functions, socioeconomic values, living museums protecting natural heritage, and as outdoor classrooms. Recognizing the functions and value of these Natural Areas and the need to protect and restore them, SFRPD agreed to support and develop a community-based habitat restoration program, today known as the NAP. A critical component of the NAP is the development of a restoration and management plan for the City’s Natural Areas – the Significant Natural Resource Areas Management Plan (SNRAMP). The SNRAMP was first adopted in 1995. In 2006, the SNRAMP was revised, with this Draft EIR evaluating the proposed 2006 SNRAMP. Most of these comments relate to the goals of the NAP, which is not the project evaluated in this EIR; however, the following is provided in response for informational purposes.

Preservation of San Francisco’s Natural Areas, and of native plant habitat in particular, is an important and long-standing policy goal for the City. Policy 4.1 of the Recreation and Open Space Element (ROSE) of the San Francisco General Plan (April 2014) recognizes the value and importance of undeveloped, relatively undisturbed Natural Areas in the city for the potential to preserve biodiversity. The policy further states that “[n]ative plant habitats should be preserved and efforts undertaken to remove exotic plant species from these areas.” The Biodiversity section of the City’s *Sustainability Plan*⁴⁴ recognizes that, even in the increasingly urbanized San Francisco environment, it is important to protect and maintain biodiversity within the City’s Natural Areas. A commitment to increasing biodiversity is also demonstrated by the San Francisco Department of the Environment’s Biodiversity Program, whose mission it is to protect, enhance and restore the biodiversity, habitats and ecological integrity of San Francisco’s natural environment - in parks, wildlands, neighborhoods and in the built environment - and to connect San Franciscans to nature in their city.

The rationale for the importance of preserving and restoring biodiversity in San Francisco’s Natural Areas is further stated both in the Management Approach section of the SNRAMP and in the Draft

⁴⁴ City of San Francisco Commission on the Environment, *Sustainability Plan for the City of San Francisco*, 1997. This document is available online at: <http://sustainablecity.org/>, accessed on June 6, 2016.

EIR Project Description. In order to address concerns, such as the loss of special-status or unusual native species or habitats, and the loss of diversity and components of a healthy ecological system, the SNRAMP sets forth several goals related to conservation and restoration. Among those goals are to maintain and enhance native plant and animal communities and local biodiversity; to decrease the extent of invasive exotic species cover; and to re-establish native community diversity, structure, and ecosystem function where degraded (SNRAMP p. 2-1). It should be noted that this management approach applies only to the 32 Natural Areas (remnant fragments of San Francisco's historic landscape) and not to all City parks managed by SFRPD.

It is true that nonnative plants and animals are commonly found throughout many of the Natural Areas, and accordingly the SNRAMP classifies the land within the Natural Areas into three management area categories (MA-1, MA-2, MA-3) based on the level of habitat complexity and sensitivity, and the presence of significant plant and animal species. The SNRAMP focuses restoration efforts on those areas that have the most sensitive and diverse habitats (MA-1) and focuses on recreation and preservation of greenspace in the least sensitive areas (MA-3).

Refer also to Response BI-15, RTC p. 4-402, and Response BI-36, RTC p. 4-470, for a more detailed discussion of the effects of invasive species.

4.B.4 Proposed Modifications to Sharp Park

Comment PD-12 Recommend removing Sharp Park and Laguna Salada from the SNRAMP

The response to Comment PD-12 addresses all or part of the following individual comments:

CBD-1-02	GGAS-1-01	NTC-1-03
SFT-1-05	Sierra Club-1-02	WEI-1-01
Bartley-1-05	Blum-1-01	Blum-1-02
Blum-1-05	Blum-1-06	Bors-1-03
Bowling-1-02	Child-1-01	Elliott-1-01
Flasher-1-02	Gravanis-1-02	Kushner-1-02
Langille-1-02	Louie-1-01	Oliva-1-01
Pfister-1-03	Rogers-1-02	Schmoll-1-01
Stringer-1-01	Weed-1-01	Wilson-1-06

- However, the Natural Areas Plan is severely flawed due to inclusion of a poison pill in the form of a sham "restoration" plan for Sharp Park. The Sharp Park element of the plan is at odds with the best available science on impacts of the golf course, it ignores the recommendations of the only peer-reviewed restoration plan for Sharp Park and it proposes further illegal impacts to endangered species at the site. Sharp Park should be removed from the Natural Areas Plan.

It is shameful that San Francisco has put the restoration of all of the City's natural areas in jeopardy by including a knowingly controversial and objectionable Sharp Park project which

has been discredited by independent scientists, restoration experts and dozens of San Francisco conservation and community groups. We question why San Francisco would include a Sharp Park element that would likely drive San Francisco's namesake species, the San Francisco garter snake, toward extinction - all to promote an unsustainable, money-losing golf course.

If San Francisco approves and attempts to implement the proposed Natural Areas Plan with the sham Sharp Park "restoration" element, it will result in additional litigation against the City for illegal and unnecessary degradation of endangered species habitat.

We find it curious that the Sharp Park element of the Natural Areas Plan ignores ongoing violations of the Endangered Species Act resulting from golf course activities such as water pumping from wetlands and mowing that are harming endangered San Francisco garter snakes and California red-legged frogs. The Natural Areas Plan ignores the current litigation against San Francisco for continuing illegal activities at Sharp Park without an approved habitat conservation plan or legal permits under the Endangered Species Act. The Natural Areas Plan ignores the pending San Francisco Board of Supervisors vote on legislation to repurpose the golf course and transition management to the Golden Gate National Recreation Area.

The Natural Areas Plan ignores the conclusions and recommendations of leading scientific experts on endangered species and wetlands restoration, who contend that the Park Department's proposed golf course activities impair the long-term survival and recovery of endangered species at the site, and that the Parks Department's alleged compliance plan is not being followed and is unworkable. The Natural Areas Plan ignores the only peer-reviewed science on alternatives for managing Sharp Park, *Conceptual Ecosystem Restoration Plan and Feasibility Assessment: Laguna Salada, Pacifica, California* (ESA-PWA 2011). The peer-reviewed report demonstrates that the best option for protecting and restoring endangered species at Sharp Park is removing the golf course and restoring the functions and natural processes of the lagoon and surrounding wetlands; and that removing the golf course to restore habitat to the east of the lagoon is essential for the long-term sustainability of endangered species found on the site.

The Sharp Park element of the Natural Areas Plan proposes numerous unnecessary, controversial, discredited, illegal and ecologically damaging projects such as: dredging Laguna Salada and other wetlands with a backhoe; continuing an illegal water pumping and management regime; filling in 5.5 acres of existing wetlands; de-watering endangered species habitat; and removing and evicting endangered species from Sharp Park to Mori Point, an activity that is extremely unlikely to be permitted by state and federal regulators and is illegal without proper permits. The Sharp Park element proposes perpetuating the very illegal management activities that kill and harm endangered species and have resulted in the current litigation against San Francisco.

The "restoration" projects proposed in the Sharp Park element elements are not based on any credible science and fly in the face of recommendations from experts on endangered species and wetlands restoration. The proposed pre-activity surveys, worker education program,

biological monitoring and illegal relocation of individual endangered species do not in any way adequately mitigate for impacts. [CBD-1-02]

- As an initial matter, Golden Gate Audubon is extremely concerned that the DEIR's inclusion of what is essentially a new project at Sharp Park will derail the approval of the DEIR and implementation of the Management Plan. As presented in the DEIR, the project at Sharp Park is far different than what has been considered in the past and would essentially force a decision to be made about management at the site before adequate environmental review and public input has been conducted. The Sharp Park plan, as now included in the DEIR, is likely to result in significant (and in our opinion, successful) challenge to the DEIR, slowing down the implementation process for the entire Project. Therefore, Golden Gate Audubon urges the Planning Department to tier Sharp Park from the DEIR for further study. We address this issue – include the question of piece-mealing review – further below.

The full plan for Sharp Park is laid out in Section III.I.23 of the DEIR and we will therefore address it further below. However, for purposes of reviewing the DEIR in its current state, Golden Gate Audubon must comment on the project as described in Section III.F.2. (DEIR, at 97-98) It appears that the Sharp Park project as described in the DEIR is significant different than what was envisioned in the SNRAMP. (See DEIR, at 105). Golden Gate Audubon believes that the Planning Department is attempting to shoehorn a much larger Sharp Park project into the SNRAMP DEIR and creating the potential for confusion, conflict and delay. On that grounds, Golden Gate Audubon recommends that the Planning Department separate out Sharp Park from the rest of the DEIR for further study, public input, and approval.

Because management of all of Sharp Park should be considered holistically, Golden Gate Audubon encourages the Planning Department to segregate Sharp Park from the rest of the SNRAMP DEIR for further environmental review and planning. [GGAS-1-01]

- The analysis of Sharp Park in Pacifica should be separated from the rest of the analysis of the Natural Areas Plan for the following reasons:

Geography - Sharp Park is in a different county, has a different user group, and has a wholly different regional environmental context.

Proposed Jurisdictional Changes - Some in the community, including Nature in the City, are advocating for Sharp Park to become part of the Golden Gate National Recreation, which currently effectively surrounds Sharp Park on three boundaries.

Ecological Distinction - Sharp Park is the only RPD Significant Natural Resource Area with two federally listed endangered species; it possesses a much larger flora and fauna than the rest of the 31 areas; and it is the only one with an acute threat of sea-level rise to protected species, valuable wetland habitat, and local communities.

Financial - Sharp Park Golf Course is in a state of uncertainty and instability in terms of whether it can be maintained as a viable and affordable public resource. The problems of dependence on pumping freshwater out of endangered species habitat, on the existence of an

old and vulnerable sea wall, and on financial subsidy for golf course function are not sustainable.

Legal - If Sharp Park is not separated from the environmental analysis of the Natural Areas Plan, then litigation is going to hold up finalization and implementation of the Plan for a much longer, indefinite period of time. This is unfair to San Franciscans, who have been waiting for 15 years for the completion of the Significant Natural Resource Areas Management Plan process. [NTC-1-03]

- We have a real concern that the inclusion of Sharp Park, which is located in San Mateo County is inappropriate and should be excluded from the project description and analysis. It is not one of San Francisco's Significant Natural Resource Areas. Further, it is embroiled in a number of issues that could delay the certification of this document and the implementation of the program.

I urge you to sever Sharp Park from the DEIR document so that the program may move forward in a timely and appropriate fashion. [SFT-1-05]

- **Large-scale changes in the proposed project for Sharp Park require further CEQA analysis.**

The proposal for Sharp Park has been radically changed as identified in Appendix J. These changes are not consistent with the project goals and purposes of the Natural Areas Program, nor are they blur the essential distinction in the CEQA process between the defined project areas and the environmental/background setting. For both of these reasons, the Sharp Park section should be segregated out from the EIR process and undergo further environmental review.

As stated in the DEIR, The SNRAMP is intended to “guide activities on properties owned or maintained by the SFRPD through its Natural Areas Program. Figure 1 is an overview map of the Natural Areas.” DEIR p. 82. At Sharp Park, the Natural Areas Program “owns or operates” only certain portions of Sharp Park: Laguna Salada, Horse Stable Pond, the connecting channel between these two aquatic features, portions of Sanchez Creek, and the eastern hillside forests. These areas are clearly labeled in Figure 1 of the DEIR, and exclude all areas that are “owned or operated” by SFRPD through its Golf Program. Indeed, as explained in several communications by the SFRPD since 2006, this distinction between Golf Program and Natural Areas Program lands has been an essential element of how the environmental assessment would be conducted – and has been repeatedly used by the Department to oppose considering alternatives for the Sharp Park Natural Area that would provide additional environmental, recreation, and other SNRAMP Project benefits on the site.

Yet every alternative proposed by SFRPD for Sharp Park beside the no-action and maintenance alternatives incorporate golf lands into the project proposal. This is particularly true in the preferred alternative, which defines the “restoration footprint” of the SNRAMP for Sharp Park to include about 1/3 of the golf course links. This creates an inherent, confusing flaw in the DEIR, because it is no longer possible to distinguish between the project proposal and the environmental setting within which the project is proposed to be

conducted. SFRPD cannot create a cohesive environmental review document if it is changing the environmental setting and baseline project area along with the project itself. This alone requires further explication and environmental review before the Sharp Park portion of the DEIR is approved.

The importance of this distinction is highlighted by the purpose and goals of the project, as stated in the DEIR. The DEIR states that the SNRAMP will “provide the framework for the long-term management of the Natural Areas.” DEIR p. 84. Section III.E.2 of the DEIR further describes the specific management categories within the Natural Areas Program jurisdictional areas, defining categories of natural areas that will have different management regimes (MA-1, MA-2, and MA-3). *Id.* But at Sharp Park, the golf course lands that are included within the “restoration footprint” are not considered to be any of these three categories of management units. This is consistent with the original project proposal for Sharp Park, as well as the maps produced during the scoping period, which clearly indicated that no golf links would be part of any management area within the plan.

These flaws create an incoherent DEIR at the critical first steps at Sharp Park. Without a clearly defined project proposal and environmental setting, none of the procedural elements of a CEQA assessment can be properly conducted. As a consequence, flawed environmental decisionmaking is likely to occur – the opposite of what CEQA is designed to do.

This is apparent in the DEIR’s complete failure to consider full environmental restoration alternatives at Sharp Park for the area’s aquatic lands and features. While on the one hand the DEIR selects as the preferred alternative for Sharp Park a plan that would redesign Sharp Park’s golf links to reduce flooding on the course, the DEIR refused to consider full environmental restoration alternatives at Sharp Park. The problem with the alternatives assessment will be discussed more fully below, but these problems have at their root the City’s failure to create a consistent project area and environmental baseline condition. Therefore, this portion of the EIR cannot simply be remedied by reviewing and adopting or rejecting another alternative during the period between the draft and final EIR: the City must also redefine its project and environmental setting to remedy this problem. [WEI-1-01]

- Our main request at this juncture is procedural: we ask that as the planning and environmental review process moves forward, that the portions of the Significant Natural Resource Areas Management Plan and the environmental review documents that pertain to Sharp Park and Laguna Salada be severed from the rest of SNRAMP planning process and the SNRAMP DEIR. Instead, the Sharp Park and Laguna Salada project should be placed on a separate planning and environmental review track. The reasons for this are numerous and are discussed in the following comments.

C. Planning Rationale for Severing Sharp Park from the rest of the DEIR.

I. CEQA Process

As the portions of the Report relating to the programmatic analysis of the Plan and routine maintenance are thorough and complete, and unrelated in any underlying environmental way to the flawed project-level analysis for Sharp Park, we request that the SNRAMP DEIR

be recirculated with the Sharp Park component of the DEIR deleted from that document for the reasons listed above. The San Francisco portion of the recirculated SNRAMP could then move expeditiously to the certification of a final EIR.

We do not believe this would constitute “piecemealing” as it can be reasonably demonstrated that these are already two separate projects. Indeed, a major reason for separating these projects, approving the programmatic elements, and enlarging the scope of the Sharp Park project to include the whole park rather than the designated 5- acre natural area is precisely to avoid “piecemealing” with respect to the various elements proposed for the Sharp Park golf course reconstruction.

2. Background

It is understood that the planning work for restoration of Laguna Salada began as an integral part of the City’s Significant Natural Resource Areas Management Plan, and has thus far been treated as part of that plan for environmental review purposes. However, now that an initial phase of analysis has been done, we believe they reveal compelling planning reasons to separate the Sharp Park/Laguna Salada restoration proposals from the rest of the SNRAMP DEIR. Reasons for severing these two tracks includes the fact that Sharp Park is only included in the SF SNRAMP EIR due to historical contingencies, that there is little intrinsic relation between the portions of the SNRAMP dealing with Sharp and the rest of the plan, that Sharp Park is located in a separate geographical area and political jurisdiction, and that these two parts of the overall “project” are already separated within the existing DEIR as a division between programmatic and project levels of analysis. [Sierra Club-1-02]

- Sharp Park should be considered separately from the rest of the plan. While we have many unique ecosystems in San Francisco Sharp Park is perhaps the most unique of all San Francisco properties. The city is already in violation of the Endangered Species Act and with the acknowledged sea level rise the only reasonable course is to return this property as a wetland. Continuing to wasting resources maintaining this property as a golf course is a grave mistake. Spending millions and perhaps tens of millions of dollars on a park that very few San Franciscan’s even know about instead of focusing on improvements of city parks is an egregious waste. If the proposed policy continues we guarantee that it will be looked back on a folly. [Bartley-1-05]
- It was, therefore, very disturbing to find that Sharp Park, located in in San Mateo County had been included in this long awaited document. By including Sharp Park in this document, the integrity and approval of the DEIR has been seriously compromised. As you well know, the issues around Sharp Park’s natural resources and their management are inextricably linked with multiple other issues which, to date, remain unresolved. Therefore, by including Sharp Park in the SNRAMP, the SNRAMP approval may be delayed unnecessarily, putting in jeopardy the entire management of San Francisco lands. Because the issues surrounding Sharp Park are multiple, complicated, and unresolved, the DEIR is, therefore, fatally compromised. [Blum-1-01]

- Some of the unresolved conflicts surrounding Sharp Park include finding a legally acceptable, long term, solution to the crime of “taking” endangered species by RPD [Blum-1-02]
- Failure to consider the increased maintenance costs it will take to stave off sea rise which will further damage the park and the endangered species and who will pay for the increased maintenance cost

Failure to ascertain if the citizens and taxpayers of San Francisco are willing to allow RPD to continue to redirect limited funds to continue to underwrite a failed San Mateo golf experience at the cost of shortchanging San Francisco City parks even further than they are today. [Blum-1-05]

- I urge you to withdraw this DEIR, sever the Sharp Park areas from the document and reissue the San Francisco portion for public comment so we can move forward in an ethical and forthright manner. [Blum-1-06]
- I feel that Sharp Park’s location and unique problems make it quite different from the natural areas in San Francisco. It is very controversial with too many unanswered questions. I am concerned that approving the DEIR as is could lock Sharp Park into an unfortunate uncertain future. On the other hand, I do not want to delay approval of the SNRAMP for the 31 natural areas within San Francisco where I feel the SNRAMP does a very good job. I feel that Sharp Park should be separated from the SNRAMP and the SNRAMP DEIR should be approved for the 31 natural areas within San Francisco without further delay. [Bors-1-03]
- If we have to separate Sharp Park from the rest of the Natural Areas Plan in order to move forward, although not my preferred approach, please, let’s do that and make some progress for our City. [Bowling-1-02]
- I’m writing to urge you to separate out Sharp park from the Natural Areas plan. Thank you for taking our comments into consideration. [Child-1-01]
- I am concerned that the Significant Natural Areas Resource Areas Management Plan is being adversely affected by the special situation surrounding the Sharp Park Golf Course. I would like to urge you to please remove consideration of Sharp Park from the Plan and allow this smart, and ecologically sound Plan to go forward to preserve 31 other of the City’s recreation and park areas. They are in dire need of improvement and not being bogged down by the lawsuits around Sharp park will allow these areas to get the attention they need. Thank you for your time. [Elliott-1-01]
- If the issues around Sharp Park are holding up approval of the plan, please separate the golf course from the rest so we can continue to maintain the other natural areas in a condition that promotes visitation. Thanks for this opportunity to provide feedback. [Flasher-1-02]
- Laguna Salada -- Please consider carefully the pros and cons of including the Sharp Park natural area in San Mateo County in the same environmental analysis as the natural areas within San Francisco County. Because Sharp Park is so complex and controversial, and the potential environmental impacts of whatever occurs there are so different from those of the in-city areas, it would make more sense to conduct two separate analyses. I realize that some

people claim that doing two separate environmental assessments could constitute piecemealing, but I fail to see how there would be significant cumulative impacts that would require the two proposals to be analyzed together. If the analyses cannot be separated, I hope that a thorough explanation of the reasoning will be provided that carefully considers the intent of CEQA. [Gravanis-1-02]

- The consideration of Sharp Park should be removed from the DEIR and placed on a separate planning track. [Kushner-1-02]
- Please separate out Sharp Park from the Natural Areas Plan so that San Francisco's nature and biodiversity is not dragged down by Sharp Park and its golf course.

Therefore, please separate out Sharp Park from the Natural Areas Plan! In addition, please ensure that the City and County of San Francisco places the protection of the natural environment and endangered species at Sharp Park Golf Course at the highest priority. [Langille-1-02]

- Please SEPARATE out SHARP PARK from the Natural Areas Plan, so that San Francisco's nature and biodiversity are not dragged down by Sharp Park and its golf course. And please RESTORE SAN FRANCISCO'S NATURAL AREAS.

Natural areas are important to my family and me, because we believe that habitats for native plants and the wildlife that depend on certain plants have already been diminished by human impacts. [Louie-1-01]

- I'm writing to recommend that the Sharp Park and golf course be separated out from the Natural Areas plan. I recommend this so that San Francisco's natural areas can get the stewardship they need without the potentially significant delay the Sharp Park golf course issue could bring. [Oliva-1-01]
- Nature in the City (www.natureinthecity.org) advocates separating Sharp Park from the Natural Areas Plan to avoid tying up the Plan in litigation. If this is necessary to avoid typing up the Plan, then I support this Action because I believe that those making legal challenges to the current recommended Actions in Sharp Park based on endangered species statutes will succeed. [Pfister-1-03]
- May I suggest, so that San Francisco's biodiversity is not threatened, that you separate the 'Sharp Park ' project from the 'San Francisco Natural Areas Plan', please. Furthermore, I believe there should be professional management of our City's natural areas and a program of ecological restoration for the City, also. [Rogers-1-02]
- I am writing to you to ask you in support of the main goals of the Natural Areas Plan. Also, I am urging you to separate out Sharp Park from the Natural Areas Plan so that we can move forward with restoring and preserving San Francisco's natural areas and biodiversity. [Schmoll-1-01]
- I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Significant Natural Resource Areas Management Plan (SNRAMP).

I am citizen of San Francisco and a supporter of the Natural Areas Program and the goals in the Natural Areas Plan. I am concerned however that because of the ongoing legislation and litigation concerning Sharp Park that it should be separated out from the rest of the environmental analysis of the Natural Areas Plan. [Stringer-1-01]

- Please consider removing the Sharp Park from the Natural Areas Plan. Thanks. [Weed-1-01]
- Separate out Sharp Park from the Natural Areas Plan. [Wilson-1-06]

Response PD-12

These comments primarily request that the proposed SNRAMP be modified by removing the proposed Sharp Park Restoration Project as an element of the project, stating that the SNRAMP and the restoration project are sufficiently distinct to allow for separate environmental analyses. Other comments state that the description of activities at the Sharp Park Natural Area is substantially different from previous descriptions. Comments also discuss the merits of the proposed actions at Sharp Park and state that the Draft EIR ignores ongoing violations of the Endangered Species Act (ESA) by the SFRPD and legislation at the Board of Supervisors to transition management of Sharp Park to the Golden Gate National Recreation Area. Other comments express disagreement with the Draft EIR's analysis of the proposed project's impacts to biological resources and analysis of project alternatives. Comments concerning a full restoration alternative for Sharp Park not analyzed in the EIR are directed to Response AL-11, RTC p. 4-600.

Removal of the Sharp Park Restoration Project from the SNRAMP Project Description

The Planning Department is responsible for analyzing the environmental impacts of the project as proposed by the project sponsor, in this case, the SFRPD. Although the lead agency is charged with proposing modifications to a proposed project—in the form of mitigation measures—to reduce or eliminate the project's potential significant impacts, a lead agency would generally not propose changes to the project description itself, such as removing the Sharp Park Restoration Project from the SNRAMP, and therefore, from the Draft EIR. Between the release of the SNRAMP and the development of the EIR, the project at Sharp Park progressed such that it could be reviewed at a project-level rather than a programmatic level. For this project, there are policy and operational reasons for including a project-level analysis of the environmental impacts of the Sharp Park Restoration Project in the EIR for the SNRAMP. The Sharp Park improvements, as described in the SNRAMP and SNRAMP Draft EIR, are an integral part of the SNRAMP itself – they are entirely within the existing Natural Areas boundary and they implement all of the general recommendations (GR) that would occur elsewhere within the Natural areas, including, but not limited to, the protection of sensitive species and habitats, typically through the control of invasive plants (GR-1), but also, in the case of Sharp Park, by restricting dogs from habitat for the San Francisco garter snake and California red-legged frog (GR-8c), as well as the management of sensitive species and vegetation series of limited distribution (GR-2). In addition, one of the project objectives, as identified on Draft EIR p 82, is to specifically “restore the Laguna Salada wetland complex for the

benefit of special status species.” Similarly, another project objective, as also identified on Draft EIR p. 82 is to “identify, prioritize, and implement restoration and management actions designed to promote the functioning of San Francisco’s native ecosystem, including the maintenance and enhancement of native biodiversity.” If the Sharp Park component of the SNRAMP project were to be removed, one of the CEQA project objectives would not be achieved (i.e., restoring the Laguna Salada wetland complex), and the other objective would be achieved to a lesser extent (i.e., implementing restoration activities).

CEQA contains no prohibition against analyzing two related projects in one EIR. Rather, CEQA prohibits piecemealing, or dividing, one project into two or more projects, which can lead to an underestimation of the project’s impacts on the environment. Here, combining the analysis of the Sharp Park Restoration Project with the SNRAMP facilitates the analysis of the two project’s cumulative impacts. Further, as stated above, the Sharp Park improvements are entirely within the existing Natural Areas boundary and they implement the management actions identified in the SNRAMP.

However, while within the Natural Areas boundary, based on feedback from resource agencies the boundaries of the restoration project (within the Natural Areas boundary) have been expanded to include portions of the Sharp Park Golf Course. Draft EIR Figure 2, Laguna Salada Restoration Footprint, Draft EIR p. 100, and Figure 3, Laguna Salada Restoration Features, Draft EIR p. 101, delineate the project boundaries. Following completion of the Sharp Park Restoration Project, those areas that were previously designated as part of the golf course that have been restored to provide habitat for special-status species would become part of the Sharp Park Natural Area. Remaining areas not slated for restoration activities would remain part of the golf course and would continue to be managed as golf course operations.

In terms of the boundaries of the Sharp Park Natural Area, the text on Draft EIR p. 104 (following Table 4, Laguna Salada Habitat Types within Restoration Footprint) has been changed to clarify the changes to the Sharp Park Natural Area boundary resulting from completion of the Sharp Park Restoration Project, as follows:

Following completion of the Laguna Salada Sharp Park Restoration Project, those areas that were previously designated as part of the golf course that have been restored to provide habitat for special-status species would become part of the Sharp Park Natural Area.

CEQA Analysis

The SNRAMP project was initially described in the NOP, which was issued on April 22, 2009. At that time, the Draft EIR was anticipated to analyze the 20-year management plan at a programmatic level, with project-level review of routine maintenance actions and habitat restoration at Sharp Park. The Notice of Preparation identified the following components of the proposed Sharp Park Restoration Project at Laguna Salada and Horse Stable Pond in Sharp Park, among others.

- SP-4a – Implement improvements to protect and enhance the California red-legged frog and San Francisco garter snake at Laguna Salada, including the following:
 - > Create shallow pools within existing wetlands,
 - > Continue monitoring California red-legged frogs and San Francisco garter snakes,
 - > Remove tires from Horse Stable Pond,
 - > Install signs and barriers to keep dogs out of Horse Stable Pond,
 - > Separate the small peninsulas within Laguna Salada from the mainland by small canals, and
 - > Restore Sanchez Creek by deepening the channel, expanding the creek corridor upstream, and buffer zones to limit human disturbance;
- SP-4b – create low mounds, planted with willows, on the western edge of Laguna Salada to serve as a visual barrier, to provide snake and frog basking sites, and to provide nesting habitat for riparian birds;
- SP-4c – reduce draw-down of Horse Stable Pond when California red-legged frog egg masses are present or maintain a stable water level during red-legged frog breeding season.

Subsequent to issuance of the NOP, the project was refined, as described in Draft EIR Chapter III, Project Description, pp. 97 to 104, in part to respond to regulatory agency comments. These refinements provided enough specificity to allow the project, as refined and revised, to be evaluated to a project level of detail.

With respect to the conclusions and recommendations of leading scientific experts, three independent scientific reviews of the 2005 Draft SNRAMP were conducted in August 2005, as stated on SNRAMP p. 1-10. Dr. Lynn Huntsinger⁴⁵ and James W. Bartolome reviewed the entire 2005 Draft SNRAMP and provided a detailed report to the SFRPD. The goal of the independent review was to assess the scientific basis for the SNRAMP and evaluate the goals, issues, and recommendations. Additionally, the reviewers were asked to determine if the 2005 Draft SNRAMP was feasible to

⁴⁵ Dr. Huntsinger holds a Ph.D. in Wildland Resource Science from the University of California, Berkeley; an M.S. in Rangeland Science from the University of California, Berkeley; and a B.A. in Chinese Studies (Modern History) from the University of California, San Diego. She is currently a Professor of Rangeland Ecology and Management at the University of California, Berkeley.

implement and if implementation of the proposed management activities would result in the desired outcome.

As described on Draft EIR pp. 97 through 104, the project description states that the activities planned for the Natural Areas can generally be divided between routine maintenance and programmatic projects. In the Draft EIR, as further described on pp. 96 to 104, routine maintenance and the Sharp Park restoration are addressed at a project level, while the programmatic projects (e.g., rerouting or constructing trails, stabilizing hillsides, and undertaking initial invasive weed or tree removal projects that typically exceed half an acre or on average 20 trees at any one time) are addressed at a program level. Programmatic projects would undergo additional environmental review, as appropriate, at the time they are proposed. In the Draft EIR, both the programmatic- and project-level components are described in detail, substantially expanding upon what was provided in the NOP. Since publication of the Draft EIR, the restoration activities proposed at Sharp Park have not changed. As previously described, the Draft EIR includes both a program-level and project-level analysis. As described on Draft EIR pp. 79 to 80, there is sufficient detail to provide a project-level analysis of routine maintenance activities and the Sharp Park Restoration Project. However, because the specific details of programmatic activities, as identified in the Draft EIR, are unknown at this time, the Draft EIR analyzes the activities at a programmatic level. CEQA allows, and it is common practice, for an EIR to include both a programmatic analysis and project-level analysis for those portions of the project where sufficient details have been developed.

Further, an EIR is an “informational document” intended to inform public agency decision makers and the public of the significant environmental effects of a project proposal, identify possible ways to minimize the significant effects, and describe feasible alternatives to the project to reduce or eliminate those significant effects. Certification of an environmental document does not constitute a project approval of any kind. Certification of this EIR (with the Sharp Park Restoration project) included does not preclude decision makers from taking other actions in the future with respect to Sharp Park or the SNRAMP.

Prior Litigation

The comment notes that litigation is currently pending regarding Sharp Park. This is no longer correct. The two actions regarding Sharp Park have been dismissed. In one lawsuit, plaintiffs sued the City in federal court, alleging the City’s ongoing maintenance and operation of Sharp Park Golf Course violated the federal Clean Water Act and the federal Endangered Species Act. This case was dismissed as moot by the federal trial court, and an appeal of that case was dismissed by the Ninth Circuit Court of Appeals (*Wild Equity Institute et al. v. CCSF, et al.*, Case No. 13-15046). In the other lawsuit, petitioners alleged that the City violated CEQA in its approval of the Sharp Park Safety, Infrastructure Improvement, and Habitat Modification Project. That case was dismissed by the state trial court (*Wild Equity Institute et al. v. CCSF, et al.*, Case No. CPF-14-513613). The outcome of these cases has no bearing on the analysis or conclusions in the EIR. This is because—as required by

CEQA—the Draft EIR analyzes the environmental impacts of the proposed project by comparing the existing physical environmental conditions against the potential physical effects of the proposed project. The existing baseline conditions at Sharp Park remain the same, and this project—including both the SNRAMP and the Sharp Park Restoration Project—could proceed, if approved by decision makers.

Transition of Sharp Park to the GGNRA

While the transfer of management of Sharp Park to the Golden Gate National Recreation Area is not a foreseeable action at this time, even if such management transfer were to occur, it would not affect the analysis or conclusions contained in the EIR. Commenters are correct in stating that the description of proposed actions at Sharp Park has been modified from previously described actions. Draft EIR Section III.G, Changes Made to the SNRAMP Since Publication, pp. 105 to 107, identifies a number of changes that have been made to the SNRAMP because certain proposed actions were (1) found to be infeasible; (2) completed under a separate environmental review; (3) incorrectly described; (4) re-assessed as contrary to policy; or (5) further developed with additional details and specificity.

Scientific Basis of the Sharp Park Restoration Project

Some comments question the scientific basis of the restoration plan and whether the actions would protect the species or are realistic. The proposed restoration plan at Sharp Park was developed by biologists that are experts in wetland, California red-legged frog, and San Francisco garter snake ecology. In addition, scientific experts from local resource agencies, academic institutions and other organizations reviewed the restoration plan during its development and as part of a science round table. In terms of the scientific basis for the SNRAMP, refer also to Response G-3, RTC p. 4-19, which indicates that the Plan was independently and affirmatively reviewed by three scientists, as well as many other agencies, organizations, and individuals who participated in the preparation and/or review of the document.

Whether implementation of proposed actions is realistic is unrelated to the analysis of impacts in the Draft EIR.

Refer also to Response PD-13, RTC p. 4-175, for a discussion of the proposed actions for Sharp Park, including the City's scientific studies, deliberations, and decision-making processes that resulted in the decision to pursue the restoration activities at Sharp Park, as well as a discussion of the alterations proposed for the golf course. In summary, and as further explained in Response PD-13, RTC p. 4-175, the golf course would replace one hole (Hole 12), as required by Draft EIR Mitigation Measure M-RE-6, Restoration of the Sharp Park Golf Course to 18 Playable Holes, p. 264. Restoration, as proposed under the SNRAMP, would require the elevation of four holes (Holes 10, 14, 15, and 18) to be raised, and the proposed habitat corridor between Horse Stable Pond and Laguna Salada would require Holes 10 and 13 to be slightly shortened or narrowed.

Comment PD-13	Proposed actions for Sharp Park
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The response to Comment PD-13 addresses all or part of the following individual comments:

NPS-1-12	NPS-1-16	NPS-1-18
NPS-1-19	SFPGA-3-13	SFPGA-3-15
Sierra Club-1-08	WEI-1-05	Keitelman-1-02
Pfister-1-02	PH-Solomon-01	

- General Comment: We are unable to find any information in the DEIR as to how management of the golf course regarding threatened and endangered species is linked with what is proposed in the document (e.g., mowing). [NPS-1-12]
- Sharp Park Restoration (pg. 103): We suggest changing the language on the following statement: “Following completion of each season’s restoration activities (anticipated between May 1 and October 15), those staging and storage areas that are not permanently modified would be scarified, re-contoured, and hydro-seeded with native vegetation to approximate their pre-disturbance condition.” We recommend changing the language to state “those staging and storage areas that are not permanently modified (or identified as staging areas for near-future approved projects) would be scarified ...” It doesn’t seem appropriate to commit resources re-vegetating an area that will be disturbed in the following project season. [NPS-1-16]
- SP-4b Recommended Management Action (pg. 145): We suggest maintaining low vegetation in these upland mounds to allow for sufficient sun exposure, possibly by including some boulders or similar substrate that wouldn’t support vegetation growth. [NPS-1-18]
- SP-8a Recommended Management Action (pg. 145): We recommend including language about working with golf course staff to reduce chemical (fertilizer/herbicide) use to the minimum required and to use chemicals appropriate for areas adjacent to endangered species habitat. [NPS-1-19]
- A description of project timing and phasing must be added.
 - (a) Page 103 infers that the Restoration project would be implemented over multiple seasons (which would run from May 1 to October 15). However, the DEIR does not state how many such seasons will be required to complete the project, or what construction activities will occur in each phase, or how such construction will affect golf operations during those phases. May 1 to October 15 is the prime season for golf operations, so the City must develop and include in the DEIR a detailed plan for how to minimize impacts to golf operations during each phase of the Restoration project implementation. [SFPGA-3-13]
- The DEIR should note that the Restoration project “recovery action” is a voluntary and discretionary action. DEIR pp. 98, 293, 326, and elsewhere correctly note that the Sharp Park Restoration plan is a “recovery action,” the purpose of which is to provide higher quality habitat for the SFGS and the CRLF. The FEIR should supplement this description by noting that the Restoration project is a completely voluntary and discretionary action by the City, and one that is consistent with the species recovery objectives of both the federal Endangered

Species Act and the California Endangered Species Act but is not required by either the FESA or CESA. [SFPGA-3-15]

- The primary objective of the Management Plan, for the Sharp Park natural area, as for the other areas, is the protection of biological resources. However, in its analysis, the DEIR defines the project as that of protecting biological resources while maintaining an 18-link golf course. The Report goes beyond its purview when it proposes to reconstruct the golf course outside of the designated natural area as the appropriate mitigation for impacts on existing course. There is considerable confusion within the document as to whether the plan is really a plan for the restoration of the Laguna Salada or a plan to reconstruct the 18-link golf course. Moreover, while the Plan envisions reconstructing the affected link elsewhere, there are no details as to exact location or environmental analysis of the impacts of such reconstruction in the Report. Our concern is that what started off as a project related to natural resource protection in the midst of a golf course has morphed into a plan to reconstruct the golf course in the midst of sensitive habitat. The goals and objectives of the project need to be clarified, and the portions of the project related to reconstructing the golf course should either be removed from the DEIR, or the scope of the project needs to be broadened to include both elements. [Sierra Club-1-08]
- **The preferred alternative at Sharp Park is infeasible because permits cannot be obtained to implement it without jeopardizing the financial feasibility of the project.**

As explained in the attached meeting notes and proposed letter from SFRPD staff, the Fish and Wildlife Service has already reviewed substantially the same plan that is proposed in the preferred alternative for Sharp Park Golf Course. And they have informed San Francisco that in order to implement this plan, it cannot be deemed a “recovery” effort, and so stringent permitting requirements will apply. These will include, among other things, the creation of a capital endowment that will fund the long-term management of Sharp Park’s natural areas. Such an endowment or trust would likely require investments of millions of dollars – making the entire proposal infeasible, or certainly less financially feasible than other alternatives available to the City.

The reason this is so is because the proposed project, particularly in light of reasonable alternatives that were nonetheless rejected by the City, has little to do with the long term restoration of Sharp Park’s special status species or the underlying environmental conditions that were destroyed by Sharp Park Golf Course. Rather, the preferred alternative reduces the probability that those objectives of the SNRAMP will be achieved, sacrificing these goals and objectives for golf course water management objectives. The proposed plan is designed to reduce flooding of Sharp Park Golf Course by dredging areas of Laguna Salada and dumping the spoils on the holes which most regularly are flooded during normal winter rains. Given the overwhelming concerns raised about this proposal by the only peer-reviewed assessment of the dredging plan (i.e., the ESA/PWA report), and its incompatibility with the goals and objectives of the SNRAMP, it is simply a violation of CEQA for the city to continue implementing a proposed project that ultimately meets objectives of other projects not within the environmental assessment presented in the DEIR. [WEI-1-05]

- Moreover, in 2004 a survey of San Franciscans found that the number one recreational demand is for more hiking and biking trails: golf finished 16th out of 19 options in the same survey. Yet the city is currently forced to cut services at recreational centers and open spaces while it subsidizes the underused golf course at Sharp Park. This is why residents of both Pacifica and San Francisco have come together to urge San Francisco to consider recreation alternatives at Sharp Park. Because this review is ongoing, San Francisco has not consented to the end-run proposed by golf advocates in Pacifica. [Keitelman-1-02]
- The Recommended Management Actions that do not involve extensive ecological restoration seem half-baked and unlikely to be successful. Is there any scientific basis for believing that these specific actions will protect endangered species? Pumping, building mounds, educating golf course staff, and monitoring water levels and species do not seem to be actions for which implementation is realistic. These types of actions seem to me apologies and cover frequently found in EIS plans for not really addressing the problem of endangered species. It appears that any alternative that does not involve extensive ecological restoration is not science based. The Plan should acknowledge that support for other alternatives is political in nature. [Pfister-1-02]
- I think that this EIR is probably going to be incomplete unless it analyzes the option of taking Sharp Park and giving it to the Golden Gate National Recreation Area. That's something that has been proposed already. I don't believe it's covered in this. I really think that should be on the table for analysis in order for this to be a complete EIR Thank you very much. [PH-Solomon-01]

Response PD-13

These comments express a variety of concerns regarding the proposed project at Sharp Park, including effects on golf course play during construction-related restoration activities, effects of continued operation of the golf course on restoration activities, whether the proposed project constitutes a recovery action, the nature of the proposed re-vegetation, golf course maintenance and use of chemical fertilizers and pesticides on the golf course, transfer of the park to the GGNRA, the context and background of the restoration project, the scientific basis and feasibility of implementing the proposed measures, the appropriateness of including the golf course in the proposed project, and the recreational desires of San Franciscans.

Impacts of Restoration Activities on Golf Course Activities

While the proposed SNRAMP project, which includes future restoration activities at Sharp Park, is entirely separate and independent from the existing and ongoing Golf Course operations, construction associated with the proposed project could affect play at the Sharp Park Golf Course. Currently, it is anticipated that construction-related restoration activities at Sharp Park would be completed in three seasons, although they may be completed in a single season. These details would be further developed as the construction documents are refined. During construction, it is anticipated that the golf course would continue to operate as an 18-hole course; however, there may be periods of time when individual holes will be temporarily closed due to construction activities,

and some holes will likely be shortened and/or narrowed, as well. Therefore, the text on Draft EIR p. 261 (first partial paragraph, under Impact RE-6) has been changed to clarify the potential temporary impacts to the playability of the golf course during construction-related restoration activities, as follows:

... significantly affecting this recreation facility. However, with implementation of M-RE-6, which calls for retaining the golf course as an 18-hole course, this impact would be reduced to *less than significant*. It is anticipated that during construction, public access to some holes may be temporarily restricted in order to allow movement of heavy equipment and machinery; however, since construction impacts would be temporary and limited in extent and duration, these impacts would also be less than significant.

In terms of balancing the requirements associated with construction-related restoration activities and the ongoing operation of the golf course, the second bullet of Mitigation Measure M-BI-6a, as fully presented in Response BI-7, RTC p. 4-365, has been changed to clarify the location of construction staging areas, access corridors, and work areas, as follows:

- Vehicle and equipment operators would use existing access roads and would remain outside of wetlands and riparian areas that are not integral to the restoration project;
- The construction documents for the Sharp Park restoration project would identify construction staging areas, access corridors, and work zones that are least impactful to biological resources, as well as golf play and operations. Avoidance of wetlands and other biological resource areas, however, would take precedence over avoidance of golf play areas, such that golf play and operations would be impacted rather than biological resources;

One of the commenters also suggests a text change that would avoid committing resources to re-vegetating a staging and storage area (associated with construction-related restoration activities) that could be disturbed in the following project season. Accordingly, the text on Draft EIR p. 103 (lines 7 to 10) has been changed as follows:

Following completion of each season's restoration activities (anticipated between May 1 and October 15), those staging and storage areas that are not permanently modified (or identified as staging or storage areas for the next season's restoration activities) would be scarified, recontoured, and hydroseeded with native vegetation to approximate their pre-disturbance condition.

Impact RE-6, which is provided on Draft EIR pp. 260 and 261, states that the proposed habitat restoration effort at Sharp Park would modify about 19 acres of the playable and nonplayable space at Sharp Park Golf Course, with some of the areas becoming Natural Areas. In terms of how impacts to actual golf course play would be minimized once the Restoration Plan is implemented, Draft EIR Mitigation Measure M-RE-6, Restoration of the Sharp Park Golf Course to 18 Playable Holes, p. 264, requires the SFRPD to coordinate with a golf course consultant with expertise in historic golf course renovation and with specific expertise, if possible, in golf courses designed by Alister MacKenzie, to restore the playability of the Sharp Park Golf Course while preserving the historic character-defining features of the course and avoiding impacts to sensitive biological resources; this would involve replacing Hole 12 either on the west (Option 1) or east (Option 2) side of Highway 1. Replacing the hole on the west side of Highway 1 may also require moving an additional hole west of the highway

to retain playability and flow of the course. Creating a new hole east of Highway 1 would decrease the number of holes west of the highway to 13 and increase the number of holes east of the highway to five. Restoration, as proposed under the SNRAMP, would require the elevation of four holes (Holes 10, 14, 15, and 18) to be raised, and the proposed habitat corridor between Horse Stable Pond and Laguna Salada would also require Holes 10 and 13 to be slightly shortened or narrowed and Hole 12 to be closed. The determination of where the replacement hole is constructed and whether additional holes need to be moved may require additional environmental review, once the golf course design is further refined and further approval actions are proposed. While removing a hole would affect the playability of the 18-hole course, Draft EIR Mitigation Measure M-RE-6, Restoration of the Sharp Park Golf Course to 18 Playable Holes, p. 264, was identified to restore the playability of the Sharp Park Golf Course as an 18-hole course, and Draft EIR p. 261 concluded that a less-than-significant project-related impact would result.

Further, as stated on Draft EIR p. 374, the operation of pumps to control water levels in Horse Stable Pond and Laguna Salada would be designed to maintain optimal water levels for the protected species. The operations of the pumps would have a secondary benefit of reducing the flooding (which can leave red-legged frog egg masses stranded once flood levels subside) on the golf course and adjacent properties. Water levels in Laguna Salada and Horse Stable Pond would not be drawn down more than necessary to prevent flooding and would, therefore, not draw down groundwater levels such that saltwater would intrude. To further prevent flooding, and as stated on Draft EIR p. 100, excavated dredge spoils appropriate for use as golf course substrate materials would be used on-site to raise the elevation of Holes 10, 14, 15, and 18 and to create the upland habitat on the east edge of Laguna Salada.

Impacts of Golf Course Activities on Restoration Activities

Recognizing that ongoing golf course activities could impact sensitive biological habitats that are enhanced and restored as part of the SNRAMP, Draft EIR Mitigation Measures M-BI-6a, Protection of Protected Species during Implementation of the Sharp Park Restoration Project, p. 326; Mitigation Measure M-BI-12a, Protection of Wetlands during the Sharp Park Restoration Project, p. 339; and Mitigation Measure M-BI-12b, Laguna Salada Restoration Project Wetland Mitigation Plan, p. 340, provide for monitoring and maintenance activities to ensure or increase the likelihood of the success of the restoration activities. Further, several SNRAMP recommendations also address how golf course operations must be implemented to avoid or reduce impacts to sensitive habitats. Recommendation SP-4e indicates that golf course vehicles should not use the service road from Moose Lodge to Horse Stable Pond, instead using the levee to avoid a “take” of an endangered species. Both Recommendation SP-4e and Recommendation SP-9a require the creation of educational materials and signage to inform and educate staff about the importance of protecting sensitive habitats and endangered species. Lastly, Recommendation SP-9c requires the creation of a buffer zone between the Laguna Salada wetlands and the golf course fairways to protect sensitive habitats and species from human disturbance. Further, measures to reduce impacts to sensitive

species or habitats (associated with the use of fertilizers or pesticides on the golf course) are discussed in the last paragraph of the following section.

Recommended Revisions to Management Actions 4b and 8a (Restoration Planning Details and Coordination between the SFRPD and Golf Course Staff)

The commenter provides suggestions regarding Recommended Management Actions SP-4b and SP-8a in terms of restoration planning details and ongoing coordination between the SFRPD and the golf course staff with respect to the use of fertilizers and herbicides.

With respect to Management Action SP-4b, while the current restoration design has advanced beyond the conceptual level (to a 35 percent level of construction detail), it is not yet at final design. Details regarding sun exposure, the type of vegetation to use in the upland mounds, and revegetation of staging and storage areas would be determined during the development of more detailed construction documents; however, it is anticipated that the upland areas would be designed with some open features to promote basking habitat for San Francisco garter snake. In addition, resource agencies may require temporary revegetation of construction areas.

The commenter requests that additional language is included in Management Action SP-8a about “working with golf course staff to reduce chemical (fertilizer/herbicide) use to the minimum required and to use chemicals appropriate for areas adjacent to endangered species habitat.” This language is included in Management Action SP-5a, provided on SNRAMP p. 6.4-14, which states that “The Integrated Pest Management and Natural Areas Program staff shall work with the golf course operations staff to reduce the use of chemicals to the bare minimum. Alternative management methods may be more environmentally appropriate for this location (MA-1d to MA-1f).” Further, as with Natural Areas staff, golf course staff are also subject to the City’s Integrated Pest Management (IPM) Program, a multistep ecologically-based approach that enables staff to make decisions about where, when, and how resources should be best allocated to control pests with the least possible hazard to people, property, and the environment. Further, as stated on Draft EIR p. 369, under the SNRAMP, only aquatic-specific herbicides would be applied to wetlands and to areas next to waterbodies. Refer to Response HZ-1, RTC p. 4-531, for a detailed discussion of the City’s IPM program, Reduced Risk Pesticide List, use of the Precautionary Principle, the SFRPD’s least-toxic decision-making model process for the treatment of invasive species, and the type and amount of pesticides that have been used by SFRPD in the Natural Areas.

As further discussed below, the proposed project does not include the existing golf course or the golf course operations and, thus, management of the golf course is not addressed in the Draft EIR; however, the Biological Opinion⁴⁶ for the Sharp Park Safety, Infrastructure Improvement, and Habitat Enhancement Project addresses the golf course operations with respect to the use of pesticides. Biological Opinion p. 15 states that “During the 10 year duration of the Project, only organic fertilizers, such as pro-biotics, blood meal, lime, and compost tea, will be used at Sharp Park, and they will only be applied to the greens, tees and surrounds. No fertilizers will be applied to fairways.” The same page of the Biological Opinion goes to say that “During the 10 year duration of the Project, the City will not use any chemical pesticides on the golf course or associated landscaped areas at Sharp Park. Golf course pests and weeds will be controlled either by hand weeding or promoting healthy soil ecosystems.”

With respect to the potential impacts of pesticide use on the California red-legged frog, and in response to a lawsuit filed by the Center for Biological Diversity on April 2, 2002, against the United States Environmental Protection Agency (EPA), the Courts issued a Stipulated Injunction that includes restrictions on the use of products that contain 66 pesticide active ingredients in 32 California counties, including San Francisco. Pesticides in the injunction that are on the San Francisco Reduced Risk Pesticide List are those containing glyphosate, imazapyr, and triclopyr. The restrictions prohibit ground applications in a 260-foot zone around any waterbody in affected areas (consisting of 200-feet of upland habitat surrounding the water and an additional 60-foot buffer zone around the upland habitat). Upland habitat includes all areas within 200 feet of the mean high water mark where the frog can find shelter, refuge from predators, or rest, and includes rocks, organic debris, small mammal burrows, moist leaf litter, and manmade features. A reduced buffer zone of only 60 feet is required for localized spot treatments using hand-held devices on rights-of-way, roadsides, pastures, lawns, or forests; spot treatments of wasp and hornet nests; individual tree removal using cut stump applications; basal bark application to individual plants; or use of pesticides in bait stations. The prohibitions in the injunction do not apply to public-entity-administered vector control programs or the control of state-designated invasive species or noxious weeds under certain conditions, such as if the application is at least 15 feet from waterbodies, no precipitation is forecast within 24 hours, or it is applied by a certified applicator under the direct supervision of a certified applicator.⁴⁷

⁴⁶ A Biological Opinion is issued by the USFWS to provide written documentation of the agency’s opinion as to whether a project is likely to jeopardize a listed species or destroy or adversely modify a listed species’ critical habitat. At issue for the SNRAMP project was whether there would be effects to the federally threatened California red-legged frog (*Rana draytonii*), the endangered San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), and the endangered mission blue butterfly (*Icaricia icarioides missionensis*).

⁴⁷ San Francisco Department of the Environmental Factsheet. *California Red-Legged Frog Stipulated Injunction Regarding Pesticide Use in Critical Habitat*. January 1, 2009.

Project Objectives and Other Proposed Uses at Sharp Park

Some commenters question whether the proposed project to restore Laguna Salada is a project to reconstruct a golf course and question whether the environmental assessment inappropriately includes the golf course. The objectives of the project, in terms of CEQA, are the project objectives articulated in Draft EIR Section III.C, Project Objectives, which include the following (refer to Draft EIR p. 82):

- To identify issues and impacts adversely affecting ecosystem functions and biological diversity;
- To identify, prioritize, and implement restoration and management actions designed to promote the functioning of San Francisco's native ecosystem, including the maintenance and enhancement of native biodiversity;
- To identify and prioritize monitoring of natural resources to support an adaptive management approach;
- To provide guidelines for passive recreation compatible with San Francisco's natural resources;
- To provide guidelines for education, research, and stewardship programs; and
- To restore the Laguna Salada wetland complex for the benefit of special-status species.

The CEQA objectives were taken from the SNRAMP objectives, with the exception of the objective that seeks to restore the Laguna Salada wetland complex for the benefit of special-status species. That particular objective came from a Board of Supervisors' recommendation, which was issued three years after the Final Draft Plan was issued, but before the EIR was prepared. There are a few additional SNRAMP objectives that are not CEQA objectives because they deal specifically with data and analysis that was required for development of the SNRAMP. In addition, the SNRAMP also articulates a series of goals that support the SNRAMP objectives.

The Draft EIR objectives do not suggest that the project should protect biological resources while maintaining an 18-link golf course. The project objectives, in fact, do not address the golf course at all and the golf course is not part of the SNRAMP project. The purpose of the Sharp Park Restoration Plan is to improve habitat for the California red-legged frog and San Francisco garter snake. The restoration project would have a secondary benefit of reducing the flooding on the golf course and adjacent properties.

The restoration project was developed in consultation with resource agencies. Those agencies determined that a plan that only identified restoration within the current Natural Areas boundary would not provide sufficient habitat for the California red-legged frog and the San Francisco garter snake. Therefore, the only way to meet the goals and objectives of the SNRAMP was to expand the restoration activities into the golf course, resulting in the elimination of one hole (Hole 12) and the narrowing and shortening of others, as previously described.

The Draft EIR evaluated the impact of changing the golf course design and concluded that significant and unavoidable project-related impacts to historic resources and significant and unavoidable cumulative recreation impacts would result from the project and, therefore, mitigation measures were identified. In order to reduce impacts to the recreation resource, Mitigation Measure M-RE-6, Restoration of the Sharp Park Golf Course to 18 Playable Holes, p. 264, would restore the playability of an 18-hole course, and in order to reduce impacts to cultural resources. Mitigation Measure M-CP-7, Documentation of the Sharp Park Golf Course, p. 222, would document the cultural resources of the Sharp Park Golf Course.

As discussed on Draft EIR p. 264, implementation of the Mitigation Measure M-RE-6, Restoration of the Sharp Park Golf Course to 18 Playable Holes, could result in additional environmental impacts. The potential impacts associated with the redesign of the golf course to replace the hole as described in Mitigation Measure M-RE-6 have been identified on Draft EIR pp. 264 to 269. Once a redesign is proposed, additional environmental review may be necessary. While the portions of the course that are included within the restoration project would become part of the Natural Area at Sharp Park, the project is not a proposal for changing the golf course, although areas on the golf course are affected by the restoration project.

One commenter cites the SFRPD's Recreation Assessment, which concludes that hiking trails and other recreational activities are more desirable than golf. As previously mentioned, the golf course is not part of this proposed project; instead, because the SNRAMP project affects the golf course, the Draft EIR must identify ways to mitigate those impacts. Further, this comment is on the merits of the project, not the environmental analysis. Comments on the project's merits have been forwarded to the SFRPD staff and Commission for consideration.

Scientific Basis for the Proposed Restoration Activities

With respect to one of the commenter's concerns about the scientific basis for the proposed restoration activities and the evaluation process that resulted in the SNRAMP, the text on Draft EIR p. 77 (beginning with the first paragraph) has been changed to add new information, as follows:

While San Francisco is by and large a densely developed urban area, fragments of unique plant and animal habitats, known as Significant Natural Resource Areas (Natural Areas), have been preserved within the parks of San Francisco and Pacifica that are managed by the SFRPD. In the late 1990s, the SFRPD developed a Natural Areas Program to protect and manage these Natural Areas for the natural and human values they provide. The Natural Areas Program mission is to preserve, restore, and enhance the remnant Natural Areas and to promote environmental stewardship of these areas. On January 19, 1995, the San Francisco Recreation and Park Commission approved the first Significant Natural Resource Areas Management Plan.

Since 1995, the SFRPD has embarked on an almost 10-year process that involved SFRPD, meetings with over 3,000 members of the public, task forces, advisory groups, independent technical advisers, consultants, and decision-making bodies to study, consider, and ultimately propose the 2006 Significant Natural Resource Areas Management Plan.

In June 2005, when the Draft SNRAMP was released for public review, three well-attended public workshops were held throughout the city. Outreach included sending fliers to neighborhood groups and residents within 300 feet of all Natural Areas, the Mayor's Office of Neighborhood Groups, SFRPD's list of neighborhood groups, and other interested parties. Announcements were also posted at all Natural Area sites. An online survey was available for individuals and members of the public that were unable to attend in person. Feedback was received from approximately 2,700 members of the public. Further, several task forces, committees, and working groups were convened as part of this process, including (1) the Natural Areas Program Citizen Advisory Committee, an ad hoc group that made recommendations on how to revise the plan, (2) a Science Round Table group that reviewed the Alternatives Report for Sharp Park, and (3) the Sharp Park Working Group. The Sharp Park Working Group, which was convened by SFRPD and facilitated by an independent party, consisted of land managers with an interest in the property, including San Mateo County, the City of Pacifica, the Golden Gate National Recreation Area, and the SFRPD. In addition, revisions to the Sharp Park Restoration Plan were also specifically made in response to input from scientists and regulatory agencies.

Three independent scientific reviews of the 2005 Draft SNRAMP were also conducted in August 2005. The goal of this independent review was to assess the scientific basis for the plan and evaluate the goals, issues, and recommendations. Additionally, the reviewers were asked to determine if the 2005 Draft SNRAMP was feasible to implement and if implementation of the proposed management activities would result in the desired outcome. The first review was conducted by Dr. Lynn Huntsinger and James W. Bartolome⁴⁸ who provided a detailed report to the SFRPD (Huntsinger and Bartolome 2005). This review reached the following overall conclusions:

- The 2005 Draft SNRAMP was based on sound science and was a reasonable compromise between ideals, practicality, and competing uses.
- The management goals (conservation, restoration, education, stewardship, recreation, and monitoring) are consistently addressed throughout the Plan.
- The proposed actions and monitoring seemed generally feasible.

The review suggested revisions to the recommendations dealing with management of the urban forest understory, grasslands (see GR-3 in Section 5), and butterfly host plants (see GR-10). The general recommendations referenced by these comments have been revised and updated. The review also suggested minor changes to the Monitoring protocols (Section 7), which were implemented.

A second review was conducted by Roy A. Woodward, PhD. Dr. Woodward made comments on and suggested edits to the text, particularly as it related to the Monitoring Plan and Protocols. The 2005 Draft SNRAMP was revised per these edits as appropriate.⁴⁹

A third review was conducted by Peggy Fiedler, PhD. Dr. Fiedler concluded that the 2005 Draft SNRAMP in general succeeded in its goals and "strikes a balance between natural resource

⁴⁸ Review: Significant Natural Resource Areas Management Plan, Lynn Huntsinger and James W. Bartolome, Submitted to the San Francisco Recreation and Parks Department, August 2005.

⁴⁹ Hand edits to 2005 SNRAMP text from Dr. Roy A. Woodward, Ph.D., Senior Environmental Scientist, Natural Resources Division, State of California, Department of Parks and Recreation, no date.

protection and the needs of citizens in a highly urbanized, densely populated, highly ethnically diverse, overall well-educated area.”⁵⁰

Over the course of several years, Ultimately, the SFRPD updated and expanded the level of detail in the 1995 plan, as well as incorporated the comments from the above scientific reviews on the 2005 Draft SNRAMP, ultimately resulting in a new the 2006 Final Draft Significant Natural Resource Areas Management Plan (SNRAMP, SFRPD 2006), with a final draft plan. The San Francisco Recreation and Park Commission approved the final draft SNRAMP plan for CEQA evaluation in August 2006. In April 2009, the Board of Supervisors introduced legislation that required the SFRPD to develop and plan for restoring Sharp Park for the California red-legged frog and the San Francisco garter snake; in response to this, the SFRPD began to develop the Sharp Park Conceptual Restoration Alternative Report, which was completed in September 2009.

In December 2009, the Recreation & Park Commission agreed to proceed with the Laguna Salada Restoration while preserving the 18-hole golf course at Sharp Park. In August 2011, the SNRAMP Draft EIR was released for public comment and in September 2011, a Historic Preservation Commission Hearing was held (with split votes as to whether Sharp Park is a historic resource) and in October 2011, the Planning Commission Hearing on the Draft EIR was held.

This SNRAMP contains detailed information on the biology, geology, and trails within 32 Natural Areas, 31 in San Francisco and one (Sharp Park) in Pacifica. The SNRAMP is intended to guide natural resource protection, habitat restoration, trail and access improvements, other capital projects, and maintenance activities over the next 20 years. The proposed project is the SFRPD’s implementation of the SNRAMP.

Refer also to Response G-3, RTC p. 4-19, for a more detailed discussion of the City’s 10-year process that resulted in the SNRAMP.

Sharp Park Recovery Efforts

Some comments discussed whether or not the actions at Sharp Park are considered “recovery efforts,” whether the actions are voluntary, are consistent with federal and state species recovery legislation, and whether they are feasible. A primary purpose of the actions described in the SNRAMP and the Draft EIR is to contribute to the recovery of the California red-legged frog and San Francisco garter snake. The actions described in the SNRAMP are consistent with the Recovery Plan for the California red-legged frog and San Francisco garter snake. The proposed restoration actions would also reduce existing flooding impacts on the Sharp Park and adjacent properties. The text on Draft EIR p. 98 (beginning of the only full paragraph) has been changed to clarify that the restoration actions described in the SNRAMP and Draft EIR are voluntary, as follows:

The Sharp Park Restoration project is a voluntary and discretionary action by the City, a primary purpose of which is to provide higher quality habitat for the San Francisco garter snake, a State and Federally endangered species, as well as a species identified as fully protected under the State Fish and Game Code, and the California red-legged frog, a State threatened species; further, it is an action that is consistent with the species recovery objectives of both the federal Endangered Species

⁵⁰ Peer review of the Public Draft Significant Natural Resource Areas Management Plan, June 2005, Peggy L. Fieldler, Ph.D., Senior Scientist II/Associate, BBL Ecosystem Science and Restoration Services to Ms. Lisa Wayne, San Francisco Recreation and Parks, September 29, 2005.

Act and the California Endangered Species Act. The improvements to protect and enhance the California red-legged frog and San Francisco garter snake at Laguna Salada under measure SP-4a are focused on restoring the marsh complex and associated uplands. ...

It is understood by all involved parties that specific permits would be required from the involved resource agencies to conduct the proposed restoration activities, but it is not assumed that permits would be denied or that they could only be obtained by jeopardizing the financial feasibility of the project. Permit requirements for the proposed project at Sharp Park are described in Table 3, Potentially Required Regulatory Approvals, Draft EIR p. 81. During the review of the proposed project, the resource agencies would determine what permitting requirements are required for the project. Financial feasibility of the project is not discussed in the Draft EIR because CEQA does not require such an evaluation.

GGNRA Management of Sharp Park

Lastly, one of the comments requests that Sharp Park is “given to” the GGNRA. As also stated in Response PD-12, RTC p. 4-168, while the transfer of management of Sharp Park to the Golden Gate National Recreation Area is not a foreseeable action at this time, even if such management transfer were to occur, it would not affect the analysis or conclusions contained in the EIR.

Comment PD-14 Support the configuration and continued operation of the Sharp Park Golf Course

The response to Comment PD-14 addresses all or part of the following individual comments:

BAGCNC-1-01	PGA-1-02	SFPGA-2-05
Archer-1-02	Gleichenhaus-1-02	Haire-1-01
Horn-1-02	Murphy-B-1-01	Valente-1-08
PH-Antonini-05	PH-Sherap-01	

- For these reasons, we thank you for your efforts to preserve the historic Alister MacKenzie golf course at Sharp Park. And we urge you to resist those who would destroy it. [BAGCNC-1-01]
- We also feel strongly that as a provider of local jobs and as an attraction that can bring golfers to your area from outside your region, there are considerable economic reasons to continue operating Sharp Park Golf Course. [PGA-1-02]
- We also feel strongly that as a provider of local jobs and as an attraction that can bring golfers to your area from outside your region, there are considerable economic reasons to continue operating Sharp Park Golf Course. The PGA of America is proud to present golf as an important component of local and regional economies as well as a healthy and fun recreational activity that can be enjoyed by young and old, men and women, as a family activity, with friends or business associates, no matter their economic or ethnic background. [SFPGA-2-05]

- Please let's dialogue with a larger vision, with an eye and ear toward to opposing view, and come to understanding that such an historic golf course must remain so that generations of adults and children can play golf, the best of all sports, for a reasonable cost, on this remarkable, historic and beautiful golf course. Your attention to this issue is greatly appreciated. [Archer-1-02]
- Reducing the footprint or significantly changing the Mackenzie designed course should be eliminated from consideration. Like many other San Franciscan's and others who play golf, I implore you to support retention of Sharp Park in its current configuration. [Gleichenhaus-1-02]
- Please, I beseech you, help us preserve this city treasure and support our efforts to keep Sharp Park intact. [Haire-1-01]
- Golf is a tremendous sport that provides exercise, enjoyment of the outdoors and underscores sportsmanship, integrity and related values. Sharp Park is a unique asset of San Francisco. The course is known by golfers around the world and has been enjoyed by local golfers because of its unique ocean side location. Given appropriate tender, loving care this course, which remains a gem available to all golfers, will shine again. In this day and age when people are working extra hard for their money and more and more enjoyable activities are getting further out of reach, it is important for us to keep this type of recreational facility open for the enjoyment of low/modest income golfers. [Horn-1-02]
- What better balance could there ever be between birds, animals and a few folks chasing their golf balls and staying well out of the way for all the wild life? God Bless Sharp Park. God Bless Sharp Park. It is a glorious combination for man, bird, and beast!!! [Murphy-B-1-01]
- In this regard, mention must be made of the incredibly ill-advised idea to convert Sharp Park Golf Course into an additional natural area, a habitat for the red-legged frog. The Sharp Park Golf Course is currently generating net income for the City, and provides a valuable recreational resource for a diverse community with respect to age, race, and affluence. To destroy such a valuable recreational resource for a ridiculous notion that red legged frog habitat could be an ecotourism draw is patently absurd. Let us remind you that the terms "recreation" and "park" are a part of the department name for good reason; recreation is an activity the staff is paid to foster, and that happens in parks, not in habitat. [Valente-1-08]
- The most important thing is to make sure that, in my opinion, that the Sharp Park golf course is maintained. [PH-Antonini-05]
- I would like to say that I'm speaking highly in favor of the golf course being preserved. [PH-Sherap-01]

Response PD-14

Some of these comments express support for the continued operation and/or current configuration of the Sharp Park Golf Course. The proposed project does not eliminate an 18-hole golf course from the Sharp Park site. Hole 12 and the other holes that would be affected by habitat enhancements would be replaced, as described in Draft EIR Mitigation Measure M-RE-6, Restoration of the Sharp

Park Golf Course to 18 Playable Holes, p. 264. Refer to Response PD-13, RTC p. 4-175, and Response BI-25, RTC p. 4-424, which further addresses the SNRAMP project and how it affects and mitigates impacts to the golf course.

In addition, the Draft EIR evaluated the Maximum Recreation Alternative, which focuses restoration in MA-1 areas and prioritizes recreation opportunities in MA-2 and MA-3 areas. With the Maximum Recreation Alternative, less habitat identified by the SNRAMP would be restored, while all or most of the recreation-related projects, such as trail network improvement, would be implemented. While this alternative would reduce impacts to recreation, the Maximum Recreation Alternative would not reduce the overall environmental impacts of the proposed project and would not meet the goals of the project. In addition, Response AL-, RTC p. 4-572, discusses an alternative that specifically seeks to maximize recreational opportunities at Sharp Park. Comments discussing the merits of the project may be weighed by decision makers; however, such comments are unrelated to the analysis contained in the Draft EIR.

<p>Comment PD-15 Support limiting Sharp Park activities to controlling invasive species, reintroducing native species, and exclusion of dogs in wetlands</p>

The response to Comment PD-15 addresses all or part of the following individual comment:

CBD-1-03

- The only proposed management actions for Sharp Park we support are those dealing with controlling invasive species, reintroducing native species and fencing dogs out of sensitive wetlands. [CBD-1-03]

Response PD-15

This comment expresses support for some, but not all, of the management actions at Sharp Park. The limited management actions proposed by the comment were considered and addressed during the 10-year period of development for the SNRAMP. The comment does not relate to the adequacy of the analysis contained in the Draft EIR.

4.B.5 Proposed Modifications to Other Natural Areas

<p>Comment PD-16 Proposed actions for Bayview Park</p>

The response to Comment PD-16 addresses all or part of the following individual comment:

Bors-1-02

- One personal thought, a short natural wildlife corridor and trail between Bayview Hill and Candlestick Point SRA might be mentioned as a future possibility. For both parks it would benefit wildlife and offer additional recreational opportunities. [Bors-1-02]

Response PD-16

This comment addresses a suggested action outside the Natural Areas boundaries and scope of the NAP. This comment has been forwarded to the SFRPD staff and Commission for their consideration in future park planning.

Comment PD-17 Proposed actions for Glen Park
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The response to Comment PD-17 addresses all or part of the following individual comments:

GGAS-1-18

Form Letter-1-24

- Management measure GC/OH-4a (Avoid removing trees with red-tailed hawk or great horned owl nests and prohibit tree removal within 150 feet of occupied nest) provides an illustration of the kind of need for sound urban forestry management discussed above. Tree inventories should be considered while nesting is underway. Information about the local of important nest trees should be recorded, preferably on maps and with GPS units or tree-tagging. Removal of important nesting trees should be avoided, even if those nesting trees are non-native (at least de-prioritized over other non-native tree removals). Staff should assess whether suitable nesting habitat exists nearby for returning breeding raptors or other birds that rely on the tall trees. [GGAS-1-18]
- Keep Glen Park dog friendly. [Form Letter-1-24]

Response PD-17

These comments focus on Glen Canyon Park, in one instance supporting the urban forestry management provided by Management Measure GC/OH-4a, but also making further suggestions about how to deal with nesting birds. Another commenter requests that Glen Canyon Park remains dog friendly.

Pursuant to SNRAMP General Recommendation GR-4a, annual breeding bird surveys are proposed to develop a list of species nesting, or suspected of nesting, in Natural Areas. As an example, prior to undertaking the project in Glen Canyon Park in 2011-2012 (refer to Comment G-3, RTC p. 4-16, for more information about the Glen Canyon project), NAP staff conducted a breeding bird survey and found no nesting birds in the area. As required by General Recommendation GR-4b, provided on SNRAMP p. 5-5, vegetation management activities that are likely to affect breeding birds (pruning, tree removal, ground cover removal, etc.) shall not be conducted during the breeding season (April 1 to September 1) unless (1) projects begun prior to the breeding season have already disturbed the area, or (2) a breeding bird survey is conducted first. If active nests (or large abandoned stick nests) of a sensitive species are discovered, a 150-foot radius avoidance buffer shall be centered on the nest site(s) to prevent disturbance of the nesting birds while using power tools. Hand weeding may occur to within 50 feet of the nest. In addition, in terms of keeping Glen Park dog friendly, only 15 percent of social trails would be closed in areas that are relatively steep, with almost four miles of trails remaining. Further, on-leash dogs would continue to be allowed access to

Glen Park, as with all Natural Areas and other SFRPD parks, unless noted otherwise (such as within athletic fields and courts, children's play areas, and sensitive habitat areas).

<p>Comment PD-18 Opposition to any habitat restoration at Glen Park that destroys coyote habitat</p>
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The response to Comment PD-18 addresses all or part of the following individual comment:

Furney-1-01

- I do not support a habitat restoration in Glen Park leads to the destruction of the habitat for the coyote(s) that currently live there. [Furney-1-01]

Response PD-18

The commenter is concerned about habitat restoration at Glen Park that could destroy habitat for coyotes.

Recently, coyote (*Canis latrans*) have been observed in San Francisco and are frequently observed on Bernal Hill and Golden Gate National Recreation Area lands (SFRPD NAP 2005). While neither the SNRAMP nor Draft EIR specifically mentions the occurrence of coyote at Glen Park, one of the goals of the proposed management actions, as stated on SNRAMP p. 6.3-9, is to improve the health and diversity of the urban forest, which would provide better habitat for many mammal species, including coyote.

<p>Comment PD-19 Proposed actions for Lake Merced</p>

The response to Comment PD-19 addresses all or part of the following individual comments:

GGAS-1-22

- In addition to the management actions already identified, Golden Gate Audubon recommends the following for Lake Merced:
 - > Improved trash management
 - Trash containers should be made wildlife-proof
 - Trash containers should be emptied regularly; currently trash is overflowing on weekends, attracting pests, non-native animals, and posing health risks.
 - > Cease dumping green waste along the sides of the lake
 - Green waste dumped around the edge of the lake eventually works its way into the lake, changing its chemical composition and contributing to pollutant problems in the lake, including eutrophication.

- > Discourage feeding of all animals.
 - o Signs should be installed to discourage the feeding of pigeons, other birds, and animals near the concrete bridge. Signs should be in multiple languages. [GGAS-1-22]

Response PD-19

This comment suggest additional management actions for Lake Merced, including improved trash management, eliminating the dumping of green waste along the sides of the lake, and discouraging feeding of all animals.

SNRAMP General Recommendation GR-14, p. 5-17, includes the following:

“Educational materials, including signage to be installed at the appropriate locations and informational handouts, shall be created that discuss the impacts of feeding wildlife and wild animals as well as the problems with releasing unwanted pets into Natural Areas.”

Regarding green waste, SFRPD operations did place green waste (mulch) to control erosion on the side of the lake; however, this was a one-time occurrence and is not a standard practice. In general, green waste is taken to an organic transfer station. However, brush, logs, rocks, and other natural elements from the site may be left on site to provide habitat for small mammals (refer to SNRAMP p. 5-12, General Recommendation GR-9a).

Regarding trash management, one goal of the SNRAMP, on p. 87, is, “Where possible, to design and maintain landscapes to discourage the accumulation of trash and illegal encampments.” Trash management is not discussed in detail in the Draft EIR because it is considered to be part of the general and ongoing operations of the SFRPD. It is, therefore, outside the scope of the SNRAMP, and the Draft EIR only analyzes the impacts of the SNRAMP. The above comments have been forwarded to the SFRPD staff and Commission for their review and consideration.

The inclusion of the above measures would not affect the analysis or conclusions of in the DEIR.

Comment PD-20	Proposed actions for Mount Davidson
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The response to Comment PD-20 addresses all or part of the following individual comments:

GGAS-1-26	MPIC-1-12	MPIC-1-16
MPIC-1-17	MPIC-2-11	MPIC-2-19
MPIC-2-20	Bowman-2-13	Burgard-1-04
Hess-1-01	Hess-1-08	Johnston-1-01
Risk-1-02		

- Mt. Davidson also provides valuable habitat for hawks, hummingbirds, and other native species. Any tree removal necessary should be conducted in a manner sensitive to these and other nesting species. [GGAS-1-26]

- Recreational Use. The DEIR notes that Mt. Davidson Park has high recreational values and trail use by the citizens of San Francisco, yet it does not address the impact of the project tree removal plan on fostering the growth of the invasive native poison-oak or how this significant negative impact on Park visitors will be mitigated. Where trees have been removed thus far, we have seen a significant increase in poison oak, often along hiking trails, and we believe this proliferation of poison oak will increase substantially as more trees are removed. The MPIC reiterates its request for the project plan to include a policy to keep poison oak at least 10 feet away from all trails at all times. [MPIC-1-12]
- The plan should also include monthly removal of all poison oak within 10 feet of trails and maintenance and protection of historic Works Project Administration (WPA) trails and retaining walls. [MPIC-1-16]
- Any activity for implementation of the SNRAMP should not restrict public use of the park or access to the historic area or viewpoints for more than 30 days at a time. [MPIC-1-17]
- SNRAMP Figure 6.2-3, Vegetation for Mt. Davidson, significantly undercounts the number of Monterey Cypress trees growing in the areas described as blue gum forest by incorrectly showing the cypress as limited to a very small area on the southeastern edge of the park. The SNRAMP vegetation inventory of Monterey Cypress should be corrected, and these cypress trees should be exempt from the tree clearing proposed to implement this program. Neither Monterey cypress nor Monterey pine are invasive, and both add greatly to the recreational and aesthetic experience within the Park, including hosting a varied bird population that would be lost with their removal. Even the California Invasive Plant Council agrees with this assessment. Both of these species are California natives; fossil evidence shows that they existed on the San Francisco peninsula in the distant past.

On Mt. Davidson, plans to destroy 1,600 trees over 15 ft tall include many Monterey cypresses. In this particular “natural area,” it is not accurate to say that “most” trees that will be removed are invasive. Since these species are native to California and have existed in San Francisco in the past, it is an exaggeration to call them non-native. The MPIC insists that all healthy cypress and pine trees in the MA-1c, MA-2c, and MA-2e areas be allowed to remain and that new cypress or pine be replanted one-for-one within in these same zones to replace each blue gum eucalyptus cut down. Furthermore, any trees removed from the MA-3 zone also should be replaced with the historic cypress, cedar, or pine species in order to maintain the historic visual character of the Sutor forest. These species grow much faster than oaks, and are more suited than oaks to survive the soil and climate conditions in Mt. Davidson Park. In fact, oaks never existed on Mt. Davidson, so no valid argument can be made for replacement of removed trees with oaks. [MPIC-2-11]

- The DEIR does not address the fact that, as demonstrated by tree removal to date, the project tree removal plan will foster the invasive growth of native poison oak, and does not describe how this significant negative impact on Park visitors will be mitigated. Where trees have been removed thus far, we have seen a significant increase in poison oak, often along hiking trails, and we believe this proliferation of poison oak will increase substantially as more trees

are removed. The MPIC reiterates its request for the project plan to include a policy to keep poison oak at least 10 feet away from all trails at all times. [MPIC-2-19]

- The DEIR also does not address how SNRAMP will limit dog access, whether recreational amenities such as benches will be disallowed, or which trails will be closed in the MA-1 and MA-2 areas. The planned limitation of access in the MA-1 and MA-2 areas of the park would significantly negatively impact recreational experience of this important park area for residents of the West of Twin Peaks District. There is now only one bench in Mt. Davidson Park, and for full enjoyment by recreational users additional benches should be allowed and installed throughout the Park, including MA-1 and MA-2 zones. The EIR should be explicit about what is meant by passive recreation – e.g., does this mean no benches, picnic tables, trashcans, significantly fewer trails in these “native plant” zones – and should analyze the impact of such prohibitions on these recreation facilities most park users would consider to be part of passive recreation.

Because the one trashcan previously in place at the summit of Mt. Davidson has been removed, litter is often left where this trashcan used to be. The EIR should be explicit in stating that the SNRAMP means that there will be no trash cans or litter pick-up in the park and should address the impact of this policy on the aesthetic experience of the park. [MPIC-2-20]

- In addition, poison oak is increasing in the parks and herbicide use is escalating. From personal experience, I know that poison oak outbreaks are debilitating for one to two weeks. When I have a poison oak outbreak, I am typically bedridden for 4 to 5 days with a painful reaction. Allowing poison oak to proliferate near city park trails should never be allowed because of health reasons. [Bowman-2-13]
- We ask that the Planning Department reconsider its plan to remove trees from Mount Davidson and spend the resources on improving access to the open area with improved trails, interpretative signage, and benches. [Burgard-1-04]
- Good morning Mr. Wycko. My mother, husband, son, brother and I would like to let you know that we strongly oppose NAP’s plans to remove trees from Mt. Davidson. I was raised in the house on Robinhood Drive that my mother still lives in. It is 1 1/2 blocks from our beautiful Mt. Davidson. My life was so much more complete growing up in the city having the gorgeous Mountain to explore, blackberries to pick and Easter Sunrise services to attend.

I still spend much time walking our dog on Mt. Davidson and it is a real highlight of our visits to San Francisco.

We oppose NAP’s plans for the following reasons:

(1) Mt. Davidson is a beautiful, cathedral like area providing serene relief for city dwellers and their dogs. NAP’s plans will destroy this meditative place and rob dog walkers and humans of much of the access. [Hess-1-01]

- Overall this magical and serene area must be protected for the public benefit and enjoyment and for the protection of this priceless natural habitat. [Hess-1-08]

- We are horrified by the proposal to remove healthy trees on Mount Davidson. It would make views of the mountain substantially uglier, and would significantly worsen the recreational use of the mountain. I would not enjoy hiking up there if I didn't get the experience of being in a dense forest.

The DEIR is misleading because it does not acknowledge that the impact of removing 1600 of Mount Davidson's trees on recreation and aesthetics would be significant and adverse. [Johnston-1-01]

- * The plan would replace 1600 or more mature and healthy trees in the middle third of the 30-acre Mt. Davidson Forest with "native scrub and grassland habitats." (MA-1e, MA-2c and MA-2e on the attached SNRAMP map) Native plant enthusiasts already have access to the entire open eastern slope of Mt. Davidson. This past year a huge swath of trees was removed by the Water Department when they installed the new pipeline to the water tank at the top of the mountain. We do not want any more sections of the forest to be removed. [Risk-1-02]

Response PD-20

These comments express concerns about proposed tree removal activities at Mount Davidson and also suggest the SNRAMP include specific policies for the removal of poison oak.

According to Draft EIR Table 5, Mount Davidson consists of a total 40.2 acres of Natural Areas, of which 30.1 acres are within managements areas (i.e., designated as MA-1, MA-2, or MA-3 lands). Tree removal and thinning for habitat preservation activities and effective opening of the understory would occur on only 9 acres (or approximately 30 percent) of the 30.1 acre urban forest. No tree removal for habitat preservation would occur in the remaining 21.1 acres of urban forest. As a result, 70 percent of the urban forest at Mount Davidson would remain "as is."

As stated in Appendix F of the SNRAMP (SNRAMP Table F-1, p. F-14), the tree removal proposed for Mount Davidson represents less than 15 percent of the existing invasive, nonnative trees, calculated as 1,600 trees to be removed out of 11,000 existing trees; the trees within the existing forest stands would be thinned, not clear cut. Further, the tree removal is concentrated in three of the seven total management areas (MA-1c, MA-2c, and MA-2e), all of which are predominantly in the interior portions of Mount Davidson, making the tree removal less visible from surrounding vantage points. The greatest tree removal, both in terms of actual numbers of trees removed and the percentage as compared to the number of existing trees, would occur in MA-1c. Table F-1, provided on SNRAMP p. F-14, shows that 82 percent of the trees in MA-1c would be removed; 31 percent of the trees in MA-2c would be removed; and 23 percent of the trees in MA-2e would be removed; overall, the total tree removal at Mount Davidson, considering the other management areas that would experience no tree removal, would be approximately 15 percent. The commenter is correctly quoting SNRAMP p. F-8, which *incorrectly* states that "the bulk of the tree removal will occur in MA-2e ..." Table F-1 provides the correct tree removal information, indicating that the majority of tree removal at Mount Davidson would occur in MA-1c.

One of the commenters requested that “all healthy cypress and pine trees in the MA-1c, MA-2c, and MA-2e areas be allowed to remain.” As described on Draft EIR p. 140, all of the invasive trees to be removed at Mount Davidson are eucalyptus; pine and cypress trees are not proposed for removal in this Natural Area. At Mount Davidson a total of 1,600 blue gum eucalyptus trees are proposed for removal over the next 20 years within management areas MA-1c, MA-2c, and MA-2e.

According to Draft EIR p. 92,

“the SNRAMP defines a tree as any plant having a dominant vertical trunk that is over 15 feet tall; tree species less than 15 feet tall are considered seedlings or saplings in the SNRAMP. Natural Areas Program staff could remove trees that have a diameter at breast height¹¹ (dbh) of six inches or less; Natural Areas Program staff would coordinate with the SFRPD arborist, who would evaluate the removal of larger trees.”

Therefore, the number of trees affected at Mount Davidson includes, by definition, trees over 15 feet tall.

In terms of the removal of invasive trees (such as eucalyptus) and/or the removal of overhanging tree limbs, as stated on Draft EIR p. 97:

“this activity typically occurs in places where trees are expanding into or threatening a native habitat or presenting a safety concern...Typically, no more than 20 trees (or half an acre) are treated at one time. This removal covers saplings and any tree over 15 feet high. Trees over six inches dbh are typically removed by tree crews at a rate of one to a few trees at a time. Trees will be removed manually and limb-by-limb, as described above.”

In the short term, tree removals would occur gradually over 20 years and some opening of the canopy at selected areas may be visible from nearby vantage points. However, in the long term, due to the removal techniques, most of Mount Davidson will still support a lush and healthy urban forest, even when tree removals are complete.

Poison oak grows equally well under full sunlight and in shaded areas. In open areas under full sunlight, it forms a dense, leafy shrub usually 1 to 6 feet high. In shaded areas, such as in coastal redwoods and oak woodlands, it grows as a climbing vine, supporting itself on other vegetation or upright objects using its aerial roots.⁵¹ According to SFRPD’s website, poison oak is very common in San Francisco natural areas, and NAP staff continuously control poison oak along trails in order to allow safe pedestrian access.⁵² Nonetheless, because it grows as a vine, poison oak can grow near trails and, conversely, hikers on social trails or off-trail can come into contact with poison oak. The SFRPD encourages hikers to become familiarized with the plant’s appearance to avoid unintentional

⁵¹ <http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7431.html>, accessed on July 28, 2014.

⁵² <http://sfrecpark.org/parks-open-spaces/natural-areas-program/natural-areas-faqs/>, accessed on October 15, 2015.

contact and, since poison oak oils can be transmitted to humans via dog hair, SFRPD recommends dogs are kept on leash and on trail to similarly avoid transmittal.⁵³ Recommendations related to removal of poison oak have been forwarded to the SFRPD staff and Commission for their consideration.

Refer to Response LU-4, RTC p. 4-216, for a more detailed discussion of the requirements for removal of a street tree, significant tree, or landmark tree. In summary, the removal of any of these trees requires a 30-day noticing period unless the tree is hazardous or poses an immediate emergency concern, in which case removal could occur immediately or under a 15-day noticing period. There are additional requirements if a written objection to the removal of a tree is filed and, in the case of landmark trees, there is a presumption that removal is not required unless it can be demonstrated otherwise. During the noticing period, no trees are to be removed. Further, all vegetation management, including tree removal, would be conducted in accordance with the breeding bird provisions outlined in General Recommendation GR-4b.

No project impacts to the Works Progress Administration features were identified as part of the Draft EIR evaluation.

One of the commenters requested that any activity for implementation of the SNRAMP should not restrict public use of the park or access to the historic area or viewpoints for more than 30 days at a time; it is not possible to include this recommendation, as some activities would require longer than 30 days to complete. SFRPD is committed to ensuring that any disturbance to a park would be as limited as possible. Further, as indicated above, if it is a Capital Project, which could exceed 30 days, there would also be a public input and outreach process, which affords another opportunity for public input.

SNRAMP p. 1-11 also goes on to describe how the SNRAMP will be implemented if changes in conditions are discovered during the 20-year monitoring and management period:

“If a plant or animal species, plant community or specific wildlife habitat of sufficient import is discovered that is not identified in the management plan, then the Recreation and Park Commission must approve any significant change in allowable uses or tree removal or approve any change in allowable access deemed necessary for protection or enhancement of the newly identified area.

Similarly, if (re)introductions result in a proposed change of management classification from a less restrictive one to a more restrictive one, such as MA-3 to MA-2 or MA-2 to MA-1, then SFRPD will seek approval for any change in Management Areas affecting land use, access, or tree removal to the Commission prior to changing the classification.

⁵³ <http://sfrecpark.org/parks-open-spaces/natural-areas-program/natural-areas-faqs/>, accessed on October 15, 2015.

The SFRPD will conduct public outreach programs to local and citywide stakeholders (including park visitors and neighbors) whenever a change is proposed to the allowable land uses, access, or tree removal as delineated in the plan. Outreach techniques and programs may include mailings, signage and on-site meetings. Should conflict with natural area protection lead the Dog Advisory Committee (DAC) to decertify one of the adjacent DPAs, a community meeting in the immediate neighborhood would be hosted by the DAC and the process would be subject to the Dog Policy's rules."

As with all comments, these comments will be considered by decision makers as part of their decision to approve, modify, or disapprove the proposed project, even where they do not pertain to the physical environmental impacts caused by implementation of the SNRAMP.

Comment PD-21 Proposed actions for Pine Lake
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The response to Comment PD-21 addresses all or part of the following individual comments:

Form Letter-1-10

Form Letter-1-25

Pfister-1-01

- I walk at Pine Lake with my dog. Please keep it open. [Form Letter-1-10]
- I walk at Pine Lake with my dogs off leash. Chihuahua meetup also there. [Form Letter-1-25]
- PL-7c & PL-7b are inadequate measures to protect the lake from dogs. Dogs do not read signs and cannot be made aware of a prohibition of entering the lake. The leash law must be enforced in this area of the park. Many park visitors with dogs have a tradition of ignoring the leash law and this can only be changed through enforcement. I would also like to see measures enacted to reduce run off into the lake, including from dog feces through enforcement of the statute requiring picking up after dogs. [Pfister-1-01]

Response PD-21

These comments express concerns about the proposed actions at Pine Lake, including proposed limitations on dog access and whether the management actions are sufficient to protect the lake from dogs.

Recommended management actions at Pine Lake include, among others, restricting dog access to the lake (PL-7b) and posting signs informing the public of rules at the lake prohibiting dog access in the lake (PL-7c). These signs would inform dog owners of the prohibition on dog access to the lake, allowing owners to handle their dogs appropriately. This is consistent with SNRAMP General Recommendation GR-14b, p. 5-17, which emphasizes the importance of providing appropriate educational signage in the Natural Areas that explains SFRPD's management activities and goals for these areas, and how they serve to protect natural resources and ecosystem functions. However, while dogs would not be allowed in the lake itself, dogs are permitted on leash within the remaining portions of the Pine Lake Natural Area and at all SFRPD parks. In fact, within the 31 parks that contain Natural Areas within San Francisco and at Sharp Park, there are a total of approximately

2,724 acres of parkland that would be available for on-leash dog use (refer to Table 5 of the Draft EIR), and additional park acreage is available at other parks throughout the city.

Enforcement of the existing leash laws and other use restrictions is an ongoing City responsibility and is not within the sole management control of the NAP staff.

<p>Comment PD-22 Proposed actions for Tank Hill</p>
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The response to Comment PD-22 addresses all or part of the following individual comment:

Gaar-1-02

- Tank Hill. The scores of non-native trees located on the summit are the major threat to Tank Hill's biological resources. The failure of the Natural Areas Management Plan to propose the removal of these trees and the failure of the DEIR to address the long-term environmental impacts of retaining the trees need to be addressed in the final EIR. The eucalyptus and acacia trees will continue to grow thereby cumulatively expanding the shade, leaf litter, fog drip and altering the chemical composition of the soil. These impacts encourage the spread of numerous highly invasive exotic plants (*Erharta erecta*, *Oxalis pes-caprae*, *Rumex acetosella* etc). All of these negative environmental impacts will continue to reduce Tank Hill's native plant community and the wildlife that depend on that community. Also, the trees are rapidly spreading to the perpendicular cliff above Twin Peaks Boulevard. The tree roots are breaking apart the chert rock which will continue to destabilize the cliff causing more landslides which destroys habitat and exposes the city to lawsuits. The DEIR fails to discuss these impacts. [Gaar-1-02]

Response PD-22

This comment expresses concern about retaining nonnative species at Tank Hill in terms of the effects on native plant communities and wildlife as well as possible destabilization of the cliff and, perhaps, resulting landslides.

As stated on Draft EIR pp. 146 and 147, the 1.5-acre MA-1 areas are grassland and rock outcrops that support sensitive species. The 0.6-acre MA-2 areas buffer the MA-1 areas. The 0.7-acre MA-3 areas include tree-dominated habitats and steep slopes in the southern portion of the Natural Area. Consistent with the commenter's opinion regarding the need to remove nonnative trees at Tank Hill, site-specific management actions include containing and reducing herbaceous and woody invasive plants; augmenting and reintroducing populations of sensitive plant species; revegetating areas where invasive plants have been removed with appropriate native species; preventing the establishment of invasive tree species; and, following the control of invasive species, installing native scrub and oaks. As stated on SNRAMP pp. 6.14-4 and 6.14-5, while no trees would be removed, the installation of native oaks at the edge of MA-2b would help increase the structural diversity of the Natural Area. Rather than tree removal, the vegetation management activities at Tank Hill are focused on the protection of sensitive species and habitats, typically through the

control of invasive plants and management of sensitive species and vegetation series of limited distribution.

The Maximum Restoration Alternative identified in the Draft EIR considers and evaluates greater tree removal than the proposed project as reflected on Draft EIR pp 495 to 509. Requests for the SNRAMP to consider additional tree removal on Tank Hill have been forwarded to the SFRPD staff and Commission for their consideration.

4.B.6 Other Proposed Modifications

Comment PD-23 The SNRAMP should consider options to control off-leash dog use other than closing dog play areas

The response to Comment PD-23 addresses all or part of the following individual comments:

CFDG-1-11

DogPACSF-1-15

SFDOG-2-15

Bartolotta-1-14

Brown-1-12

Demetrious-1-03

Jake-1-04

Kelly-1-06

McCalla-1-02

Naima-1-02

Saino-1-01

Vitulano-1-03

- This EIR does not adequately analyze mitigations short of closing DPAs if any impacts can be proven. [CFDG-1-11]
- The NAP EIR does not adequately analyze mitigations should any impacts from dogs be proven other than closing the DPA. Fences are mentioned briefly, while DPA closures are featured prominently in the EIR. Other mitigations – education, signage, more extensive fencing, etc. – are not discussed. NAP seems to go straight from a single impact to closing the DPA. [DogPACSF-1-15]
- The NAP EIR does not adequately analyze mitigations other than closing the DPA should any impacts from dogs be proven. Fences are mentioned briefly, while DPA closures are featured prominently in the EIR. Other mitigations - education, signage, more extensive fencing, etc. - are not discussed. NAP seems to go straight from a single impact to closing the DPA. [SFDOG-2-15] [Bartolotta-1-14] [Brown-1-12]
- I feel that better information/ signage/education about what areas should not be disturbed and what areas dogs should not be allowed to congregate or play extensively on would mitigate the effect of dogs on the land. Please consider closure of DPAS carefully and consider alternative options with signage and community involvement in maintenance and rehabilitation. [Demetrious-1-03]
- The NARMP EIR does not adequately analyze mitigations should any impacts from dogs be proven other than closing the DPA, even though less draconian measures could be developed. [Jake-1-04]
- The NAP EIR does not adequately analyze mitigations short of closing DPAs if any impacts can be proven. [Kelly-1-06]

- Perhaps the threat of fines could be introduced to discourage bad behavior (people who let their dogs out of their site, bring overly aggressive dogs, do not pick up their dogs waste, etc). [McCalla-1-02]
- If the fear is that dogs will damage plants, wouldn't adding fencing or other means of isolating dogs from vegetation be a more effective solution than to ban off-leash dogs?
 - > The NAP EIR provided no evidence that dogs have an impact on plants and wildlife. Is this all from wild speculation or is there any proof that can substantiate such a dramatic change in the city policy.
 - > Quite the opposite, the NAP EIR does not take into account scientific studies that show off-leash dogs have little impact on plants and wildlife [Naima-1-02]
- I am writing to request that the proposed change of off-leash access to San Francisco parks such as Bernal be modified to allow off-leash access but increase signage warning dogs and people about sensitive plant areas. [Saino-1-01]
- The Plan should be more precise and identify specific problem areas where observations directly attributable to dogs have been made. This is not done. It is especially curious why the small DPA at Lake Merced is proposed for closure. This area is hardly used - mainly because its not big enough – but the City should specifically state what the plans are for this area and how restoration is not compatible with continued recreation with our dogs. Mitigation measures should be explored and evaluated for each area that is proposed to be limited, to see if any documented impacts can be reduced through mitigation before closures are considered. [Vitulano-1-03]

Response PD-23

These comments question whether mitigations, such as the use of fencing or other means of isolating dogs from vegetation, could be a more effective solution than banning off-leash dogs. In addition, one commenter states that the EIR did not provide evidence that dogs could have an impact on plants and wildlife and another commenter requests additional information about the plans for restoration of Lake Merced.

The SNRAMP proposes to restrict dogs from three sensitive habitat areas in the following Natural Areas: McLaren Park, Bernal Hill, and Lake Merced:

- At McLaren Park, the 0.6-acre portion of Gray Fox Creek would be made off limits to dogs and the surrounding 7.7-acre quail and wildlife habitat would be made available for on-leash use only. This would affect a total of 8.3 acres of the existing 61.7-acre Natural Area, with 53.4 acres of off-leash DPAs remaining. It was determined that fencing would not be a necessary or appropriate solution to control dog use at McLaren Park because fencing the creek area could prohibit or discourage wildlife movement.
- At Bernal Hill, areas with steep slopes that are not conducive to dog use, some of which contain locally significant plants, 6.0 acres would be converted to on-leash/on-trail areas in order to prevent erosion caused by dog running; however, 15.0 acres of flat areas would

remain available for off-leash dog play. It was determined that fencing would not be a necessary or appropriate solution to control dog use at Bernal Hill because on-site trails are provided in areas to be converted from off-leash to on-leash dog use.

- At Lake Merced, the 5.0-acre DPA would be closed to protect sensitive dune scrub habitat and because dogs using the DPA located at Lake Merced present a risk to special-status bird species (white-crowned sparrows) by disturbing bird nests. The restoration activities at Lake Merced are described in detail on Draft EIR pp. 134 to 137 and graphically depicted in SNRAMP Figure 6.1-9 on p. 6.1-33. In summary, invasive species would be removed; sensitive habitats would be maintained and enhanced (including bird nesting and foraging habitat); populations of rare plant species would be reintroduced; nonnative turtle species would be occasionally removed to protect the western pond turtle; public access to the East Lake water and shoreline would be restricted from April 1 to August 31 to avoid disturbing breeding turtles; and the DPA would be closed. Habitats to be enhanced generally include oak woodland, diverse coastal scrub with grasslands and open dune gaps, mixed forest, and native scrub; other existing habitats would be maintained.

In total, of the 95.2 acres of existing DPAs within the Natural Areas, the project would convert approximately 20 percent to on-leash dog areas (approximately 19.3 acres), leaving 80 percent available for off-leash dog use (approximately 75.9). The closure and reduction in size of existing DPAs, along with the other management, monitoring, and restoration actions identified in the SNRAMP, comprise the proposed project for purposes of this EIR and this EIR analyzes the potential impacts of these actions as compared to existing conditions. Response RE-13, RTC p. 4-347, fully describes the on-leash and off-leash areas providing throughout the city and why each of the DPAs would be reduced in size or closed.

Also, while additional sensitive habitats have been identified in other Natural Areas, these areas are not currently proposed for a change in dog access, and dogs are welcome, on leash, at all SFRPD parks. In fact, within the 31 parks in San Francisco that contain Natural Areas within San Francisco and at Sharp Park, there are a total of approximately 2,724 acres of parkland that would be available for on-leash dog use (refer to Table 5 of the Draft EIR), and additional park acreage is available at other parks throughout the city.

SNRAMP p. 5-11 specifically states that if park users and dogs stay on trails, no further access restrictions or fencing would be required. However, if a lack of enforcement and compliance with leash laws continues and/or damage to sensitive habitat areas is observed, the SFRPD could consider restricting access to sensitive habitat areas, as described in the Dog Policy, which could include the installation of physical barriers. However, permanent physical barriers, such as fencing, are viewed as a last resort to be used only after signage and other soft solutions have been shown to be ineffective. If fences are installed, public access would still be allowed on designated trails.

In terms of the potential closure of DPAs in the future, the Draft EIR included Mitigation Measure M-BI-1a, Protection of Protected Species and Riparian and Wetland Habitat, p. 298, which would

require the SFRPD to evaluate its DPAs in accordance with the SFRPD's Dog Policy and monitor them for adverse effects. If substantial adverse impacts are confirmed, the SFRPD would take actions to protect the impacted resources, including protected species, which may include installing signs, fencing, or protections including, but not limited to, decommissioning DPAs, in accordance with the SFRPD Dog Policy. Additionally, any DPA closure beyond those expressly identified in the SNRAMP may require additional environmental review.

In terms of the reduction in the amount of off-leash DPAs within Natural Areas, the SNRAMP proposes a Project that the EIR, in turn, evaluates; therefore, it is the SNRAMP, and not the EIR, that proposes the reduction of DPAs. Several of the commenters stated that the "NAP EIR does not adequately analyze mitigations should any impacts from dogs be proven other than closing the DPA." The proposed reduction in DPAs is not a mitigation measure, but is part of the proposed SNRAMP project.

Refer also to Response G-25, RTC p. 4-106, for a discussion of potential impacts of dogs on plants and wildlife; Response G-19, RTC p. 4-88, and Response RE-13, RTC p. 4-347, for a discussion of the on-leash and off-leash dog areas provided before and after implementation of the SNRAMP. Response RE-13, RTC p. 4-347, also provides a discussion of recreational impacts caused by the reduction in the amount of DPAs.

<p>Comment PD-24 Specificity about which dog-related activities would be allowed in specific areas and locations</p>
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The response to Comment PD-24 addresses all or part of the following individual comment:

GGAS-1-13

- Dog-related recreation in the Natural Areas should be limited to areas and activities that are appropriate for each area. (See DEIR, at 110) For example, the walking of dogs on leash around Lake Merced may be appropriate, while permitting a dog to swim in the lake off-leash would not. The DEIR could be greatly improved by a site-specific discussion of which dog-related activities will be allowed. [GGAS-1-13]

Response PD-24

This comment indicates that dog-related recreation in the Natural Areas should be limited to activities that are appropriate for each area.

SFRPD has not established park-by-park or Natural Area-by-Natural Area dog management policies. Generally, on-leash dog use is allowed throughout all Natural Areas, and off-leash use is allowed only within designated DPAs. Dogs are excluded from athletic fields and courts, children's play areas, and sensitive habitat areas and are temporarily barred from restoration areas. Further, each SFRPD park, whether a Natural Area, a DPA, or a neighborhood park, is required to provide signage indicating what type of dog use is acceptable (e.g., on-leash, off-leash, or prohibited) and what is expected for responsible dog ownership (e.g., pick up and remove dog waste, control

excessive barking and noise, prevent digging and destructive behavior, or keeping your dog's vaccinations and license current).

In terms of off-leash dog use, the project proposed by the SFRPD—which is evaluated in this Draft EIR—includes the conversion of 19.3 acres of off-leash DPAs within three Natural Areas to on-leash areas (refer to Draft EIR p. 257) in order to maintain and restore native habitats, while protecting areas of high conservation value. Eighty percent of off-leash areas would remain within the Natural Areas, with more on-leash and off-leash areas provided throughout the city, as further described in Response RE-13, RTC p. 4-347, and Response PD-19, RTC p. 4-189. In addition, refer also to Response PD-23, RTC p. 4-198, for a detailed discussion of which DPAs would be reduced in size or closed and for what purpose.

Comment PD-25 Employ adaptive management for dog-related damage to native grassland and wildflower areas
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The response to Comment PD-25 addresses all or part of the following individual comment:

GGAS-1-25

- Specifically, Golden Gate Audubon supports the protections at the Gray Fox Creek area and also recommends that if the native grassland and wildflower areas near Shelley Loop and Geneva DPAs show harm to these plants attributed to dogs then adaptive management action should be implemented to protect the plants. [GGAS-1-25]

Response PD-25

This comment expresses support for the protections at Gray Fox Creek and also recommends an adaptive management strategy if the native grassland and wildflower areas near Shelley Loop and the Geneva DPAs show evidence of dog-related impacts.

The commenter's support of protections at Gray Fox Creek is noted. Refer to Response PD-23, RTC p. 4-198, for a discussion of the SFRPD's policy and process for monitoring DPAs, and Response G-25, RTC p. 4-106, for impacts caused by dogs, as well as the various options available to prevent or reverse those impacts.

The commenter also recommends that if the ongoing use of the DPAs show harm to native grassland and wildflower areas (through the ongoing monitoring identified in Draft EIR Mitigation Measure M-BI-1a, Protection of Protected Species and Riparian and Wetland Habitat, p. 298), then an adaptive management approach should be employed. Draft EIR p. 90 describes the SNRAMP's Adaptive Management Approach as a strategy for managing Natural Areas that is a flexible learning-based approach to managing complex ecosystems. Adaptive management recognizes that some uncertainty exists about the nature of ecosystems and the organisms and processes that define them. Adaptive management, as applied to natural systems, involves a continuous cycle of systematically monitoring biodiversity and other ecosystem goals, and reassessing the plans,

strategies and goals, methods, and questions that underlie the management approach. Land managers then use this information to evaluate successes and failures of management actions and to refine techniques and approaches. Therefore, the SNRAMP includes, and is based upon, adaptive management principles.

Comment PD-26 Coordinate management actions with adjacent open space managers

The response to Comment PD-26 addresses all or part of the following individual comment:

NPS-1-01

- Plan Objectives (pg. 84): We suggest adding an objective that the RPD will coordinate management actions with adjacent open space managers so that habitat restoration work can be maximized over a larger area. [NPS-1-01]

Response PD-26

This comment relates to the proposed restoration work at Laguna Salada in Sharp Park, which is adjacent to the GGNRA-managed lands at Mori Point. The NAP has worked with the GGNRA cooperatively over the last decade (1) to monitor and research California red-legged frog breeding and movement; (2) to restore areas around Horse Stable Pond, including cleanup of the tire pile; and (3) for the GGNRA's improvements to Mori Point, including the installation of fencing and plants associated with that project. The SFRPD would continue to do so where appropriate.

Comment PD-27 Recreation activities should include community stewardship

The response to Comment PD-27 addresses all or part of the following individual comments:

SFT-1-02

Gerrie-1-02

Langille-1-06

Pfister-1-04

Stringer-1-03

Swenerton-1-03

Wilson-1-03

- Community Stewardship should be included as a recreational use. The hundreds of volunteers who regularly tend the City's significant natural areas not only provide a significant resource to the Recreation and Parks Department, they are receiving a recreational benefit that should be recognized and quantified in this document, which designation perpetuates a fragmented approach to natural resources management. [SFT-1-02]
- This plan should include community stewardship of recreational use of NAP land [Gerrie-1-02]
- For the purposes of the SNRAMP DEIR, recreation should include community stewardship. This would change the balance of purported recreational impacts. [Langille-1-06] [Pfister-1-04] [Wilson-1-03]
- The GGNRA, in their most recent Management Plan, includes community stewardship as a form of recreation in their analysis of alternatives. I encourage you to do the same. Such an

evaluation may change the equation that evaluates impacts to recreation, and ultimately lead to a different conclusion of what is an environmentally superior alternative. [Stringer-1-03]

- My main criticism is the fact that the analysis does not value community stewardship and restoration activities in the Natural Areas as a positive impact on recreation. [Swenerton-1-03]

Response PD-27

These comments express a desire for community stewardship to be included as a recreational use.

As stated on Draft EIR p. 155, the mission of the NAP is two-fold: to restore and enhance remnant Natural Areas and to develop and support community-based stewardship of these areas. In fact, one of the CEQA and SNRAMP objectives is to provide guidelines for educational, research, and stewardship programs. Draft EIR p. 86 articulates the SNRAMP's stewardship goals, which include:

- To develop and support opportunities for public stewardship of Natural Areas;
- To foster neighborhood stewardship and volunteer groups; and
- To provide diverse opportunities for participation by stewardship groups.

The SFRPD and the Draft EIR consider community stewardship as a form of recreation; further, the EIR considers the physical, environmental impacts caused by all forms of recreation, from stewardship to active recreational uses, with an emphasis on whether the SNRAMP would cause a physical deterioration of recreational facilities caused by an increase in use of existing facilities or the construction or expansion of new facilities.

Comment PD-28 Identify long-term, sustainable solutions of wetland protection and restoration

The response to Comment PD-28 addresses all or part of the following individual comment:

NPS-1-14

- General Comment (Laguna Salada): We suggest that the plan clearly identify a long-term, sustainable solution of wetland protection and restoration that addresses rising salinity, sustainability of the seawall, and the issues associated with the pumping. [NPS-1-14]

Response PD-28

This comment requests that the SNRAMP identifies wetland protection and restoration activities that address rising salinity, the viability of the seawall, and issues associated with pumping.

The comment is in regards to the merits of the project. These comments have been forwarded to the SFRPD staff and Commission for their consideration. The comment does not affect the adequacy of the analysis in the EIR. However, the following additional information is provided. Regarding salinity, no evidence has been found that average salinity is rising at Laguna Salada.

The Sharp Park seawall is outside the Natural Area boundary and, therefore, outside the scope of the SNRAMP and the proposed project. As stated on Draft EIR p. 103, “[w]hile management options for the Sharp Park seawall, including a naturally managed seawall and shoreline, have been considered by the SFRPD, those options are not proposed as part of the SNRAMP. Thus, they are not addressed in this EIR.” SFRPD has not yet proposed a specific management solution for the seawall.

Ongoing pump operations at Sharp Park are handled through the management of the Sharp Park Golf Course and are not considered part of the SNRAMP. However, SFRPD has received a biological opinion from the U.S. Fish & Wildlife Service that addresses certain infrastructure improvements and golf course operations. SFRPD will use this information in developing long-term plans related to pump operations. Short-term pumping associated with the restoration of Laguna Salada is discussed on Draft EIR p. 102. The proposed SNRAMP would not preclude future management actions at Laguna Salada.

Comment PD-29 Management action based on vegetation type

The response to Comment PD-29 addresses all or part of the following individual comment:

NPS-1-17

- SP-3a Recommended Management Action (pg. 144): We recommend this management action be applied based on vegetation type. For example, branches/logs that are contaminated with some invasive species (such as invaded with ripe seeds, cape ivy, untreated [chemically] eucalyptus trees, etc.) should not be retained. [NPS-1-17]

Response PD-29

This comment recommends that Management Action SP-3a is applied based on vegetation type.

The text on Draft EIR p. 144 (seventh bullet) has been changed, as follows:

- SP-3a – Preserve natural or biodegradable elements (branches, trees, and logs) during vegetation management and remove other materials. Elements that are contaminated with invasive species (such as invaded with ripe seeds, cape ivy, untreated [chemically] eucalyptus trees, etc.) would not be retained;

Comment PD-30 Request that Mount Davidson be removed from the SNRAMP if the Maximum Recreation Alternative is not adopted

The response to Comment PD-30 addresses all or part of the following individual comments:

MPIC-1-18

MPIC-2-03

- If the Planning and Recreation and Parks Departments do not adopt the Maximal Recreation Alternative and are not willing to completely implement the above-requested mitigations to the SNRAMP and augmentations to the DEIR, the MPIC requests that these Departments remove Mt. Davidson from the SNRAMP. [MPIC-1-18]

- If these alternatives are approved and implemented, the MPIC will seek to have Mount Davidson Park removed from the Natural Areas Program and returned to its original purpose as a recreational facility subject to all of the maintenance standards required by Proposition C, passed by voters in 2003.

Therefore, if the Planning and Recreation and Parks Departments do not adopt the Maximum Recreation or Maintenance Alternative, are not willing to fully analyze the additional impacts inadequately addressed in the DEIR, and fail to reduce the scope of the SNRAMP, the MPIC will request that Mt. Davidson Park be removed from the SNRAMP. This would be the only acceptable solution to avoid permanent degradation of this important environmental resource for residents of one of the densest cities in the United States. Mount Davidson Park is a public treasure – not a biological museum. [MPIC-2-03]

Response PD-30

These comments request that if SFRPD does not adopt the Maximum Recreation or Maintenance Alternatives and are not willing to implement the identified mitigation, Mount Davidson should be removed from the SNRAMP.

These comments do not raise any specific environmental issues about the adequacy or accuracy of the EIR's coverage of environmental impacts that require a response in the RTC document under CEQA Guidelines Section 15088. As per the CEQA Guidelines, this EIR is an "informational document" intended to inform public agency decision makers and the public of the significant environmental effects of a project proposal, identify possible ways to minimize the significant effects and describe feasible alternatives to the project to reduce or eliminate those significant effects. Comments in support of an EIR alternative over the proposed project will be considered by decision makers as part of their decision to approve, modify, or disapprove the proposed project. This consideration is carried out independent of the environmental review process. Specific comments concerning the adequacy and accuracy of this EIR are addressed in this RTC.

Comments requesting reforestation plans that include measures of the likelihood of success have been forwarded to the SFRPD staff and Commission for their consideration. Refer also to Response AE-1, RTC p. 4-219, for a discussion of the aesthetic impacts of tree removal. Further, Section 6 of the SNRAMP provides the species that are anticipated to be planted in each Natural Area based on the SNRAMP's goals and the desired outcomes for each Natural Area.

Comment PD-31 Success of existing habitat restoration efforts should be evaluated

The response to Comment PD-31 addresses all or part of the following individual comment:

Bowman-1-13

- The success of the NAP existing restorations should be evaluated and incorporated into the EIR. In addition to studying the actual changes in vegetation and wildlife, the studies should include evaluating how the public perceives the changes. As an example, I loved Pine

Lake the way it was before the fences and the de-vegetation of the area, and I would express that in a survey. I personally feel the Glen Canyon and Sharp Park forests could do with some trimming but find them magical oasis and expect others find them equally unique and special. I equally appreciate the more manicured parks or the vast open spaces up and down the coast that are pre-dominated by coastal scrub like that being promoted. However, I believe the current balance of these areas is appropriate and does not warrant major changes. I cannot find a comprehensive analysis showing that actual monitoring of wildlife in the Sharp Park forested/eucalyptus areas versus the scrub/grassland areas. The analysis seems to be completely speculative. One would expect to see the actual monitoring that has occurred that actually demonstrates that more wildlife is supported by native vegetation than by the non-native plants. [Bowman-1-13]

Response PD-31

This comment suggests that the Draft EIR should consider the success of the NAP's existing (or previous) restoration efforts.

Consideration of past habitat restoration efforts and the public's input regarding modifications to the existing landscape conditions were part of the extensive development process for the SNRAMP that has occurred over a 10-year period. Refer to Response G-10, RTC pp. 4-50, for a discussion of the public outreach process and the public review process. Also, refer to Response G-3, RTC p. 4-19, for a description of what has occurred over the 10-year period in order to complete the final Draft SNRAMP. As an example of where public or technical advisory input influenced the SNRAMP, the plan now includes an adaptive management component that would allow SFRPD to evaluate the success of habitat restoration projects and to take corrective actions. Development of the SNRAMP also considers the native plant species best suited to the environmental and climatic conditions and capable of supporting the desired wildlife populations; those native species are discussed throughout the SNRAMP and Draft EIR, but are particularly highlighted in SNRAMP Section 6, Site-Specific Conditions and Recommendations. That input resulted in the Final Draft SNRAMP, which is the proposed project with amendments as described in the Draft EIR. As previously mentioned, the Draft EIR evaluates the physical environmental impacts of the project, which includes construction activities and certain maintenance activities.

In terms of past restoration and revegetation projects, according to SFRPD staff, some have been successful and some have not, which is an anticipated outcome in an adaptive management framework, which is designed to respond to a variety of environmental and human conditions in order to increase the chance of success. Among the successful revegetation projects are various sites along Islais Creek in Glen Canyon, the entryway plantings at Billy Goat Hill and Grandview Hill, scrub restoration at Corona Heights, Lake Merced, and McLaren Park, and various scrub and oak woodland restoration projects in Golden Gate Park.⁵⁴ Refer also to Response PD-10, RTC p. 4-155,

⁵⁴ Memorandum from Lisa Wayne to ESA (Terri Avila) regarding revegetation success, September 12, 2014.

and Response PD-11, RTC p. 4-159, for a description of the SNRAMP's and NAP's goal of restoring native habitats in order to increase biodiversity, which includes supporting native wildlife.

Comment PD-32 Native restoration should be allowed in unforested areas

The response to Comment PD-32 addresses all or part of the following individual comment:

Nagle-1-01

- I am writing today to comment on the Draft EIR. In particular my family opposes the Maximum Restoration Alternative and supports the Maintenance Alternative

I was born in San Francisco in 1968 and have lived here my whole life. My extended family resides here and I have recently had a child who I plan to raise on the west side of San Francisco. My son and I love the trees and forests of this area; we hike on Mount Davidson, walk in Stern Grove and enjoy the peaceful respite that the dense forests give from the hustle and bustle of the city. The trees and urban forests have shaped my existence during my life here, and I would hate to see them drastically change.

I became aware of the NAP program and their plans to restore native habitat only recently when I observed some cleared areas at Pine Lake in Stern Grove. The cleared and newly planted area was struggling and I wondered why this was done since the nearby forest was flourishing. This piqued my interest and since then I have researched the NAP program and reviewed the Draft EIR, so I feel I have a good understanding of what is at stake here.

While I understand NAP's rationale in restoring native habitat in general, I disagree with their aggressive plan to remove non-native trees and brush in the majority of open spaces in the city. I object to their practices, including the spraying of voluminous amounts of herbicides to prevent non-native plants from returning. The areas where they have done their restoration appear to be failing in many instances; to allow the restorations to proceed on a city-wide scale would be in effect rewarding failure.

There are budget concerns as well; can San Francisco truly afford to spend the money to clear and re-plant the amount of forested area envisioned by the NAP EIR? We should spend money on schools, homelessness and a plethora of other pressing matters before we pay to clear forested hillsides.

A compromise is in order; I think NAP should be allowed to do native restorations in unforested areas where they have less clearing to do. Please leave the older trees and forested areas alone so that the next generation of San Francisco families can enjoy them as much as I have. [Nagle-1-01]

Response PD-32

This comment expresses general opposition to the proposed project and also asks that native restoration be conducted in unforested areas. These comments on the merits of the project have been forwarded to the SFRPD staff and Commission for their consideration.

With respect to the opposition to the Maximum Restoration Alternative, refer to Response AL-, RTC p. 4-568, and with respect to the support for the Maintenance Alternative, refer to Response AL-, RTC p. 4-585.

Draft EIR Table 5 (provided on p. 114) indicates that of the 117,433 invasive trees located within the Natural Areas (including Sharp Park), 18,448 trees (or 16 percent) would be removed and 98,985 trees (or 84 percent) would remain, consisting of 15,000 trees that would be removed in Sharp Park and 3,448 trees that would be removed in the San Francisco Natural Areas; therefore, under the SNRAMP, nonnative trees and brush would not be removed in the majority of Natural Areas in the city. Also, restoration would be accomplished in both unforested areas, as well as areas where nonnative, invasive species have been removed. As stated on SNRAMP p. 1-3, one of the objectives of the Plan is to promote the functioning of San Francisco's native ecosystem, including the maintenance of native biodiversity, which requires the removal of invasive species. Refer also to Response HZ-1, RTC p. 4-531, for a discussion of SFRPD's herbicide use and practices and Response G-4, RTC p. 4-29, for a discussion of funding sources and cost for implementation of the SNRAMP.

Comment PD-33 Maintenance of city parks

The response to Comment PD-33 addresses all or part of the following individual comment:

Naima-1-01

- Hi, I've been living in SF in the lower haight for 8 years now, and have recently opened a business downtown. My dog and I frequent duboce park, alamo square, crissy field, fort funston, and other offleash dog areas. The large presence of off-leash dog play areas was a very important factor in my decision to move to San Francisco.

I am writing in response to the solicitation for comments on the proposal to reduce the off-leash dog play areas. I am very opposed to the reduction of off-leash and would like you to consider the following:

- > I feel that biggest negative factor affecting the parks is the maintenance staff of the parks, and the presence of dogs - especially at night - have made the parks a much safer environment by keeping drug dealers, and other unsavory individuals out of the parks (thanks to the responsible owners).
- > Examples I've seen of the problems caused by maintenance staff at the parks:
 - No automated sprinkler system has been installed at duboce park and thus someone needs to turn the sprinklers on/off manually. I've found the park flooded many times by having the sprinklers not turned off
 - Drainage has been a huge problem at duboce park, and although the park service promised to do something about it years ago, no solution has been deployed. the park has recently been aerated, but this is a stop-gap solution and it should have happened years ago.

- The excessive amount of rain from last year caused the ground to be soft (thanks to the lack of drainage). The maintenance staff would mow the lawn after heavy rains constantly, causing huge trenches to form in the grass from the wheels of the mower digging into the ground. My dog suffered a hip injury as he fell into one of these trenches while chasing after a ball.
- Additionally, when the ground becomes damaged, and holes form which can be dangerous to individuals and dogs who can trip in them, they are not filled for weeks.
- A gardener sprayed pesticide/herbicide at a local park that a friend frequents and did not post any signage. The position got into my friend's dog's system and almost killed him.
- There have been reports in the papers of unionized garden workers not planting plants and instead giving them out to friends while taking the day off [Naima-1-01]

Response PD-33

This comment expresses concern regarding the existing maintenance of the City's parks, including flooding and drainage at Duboce Park, which is not a Natural Area, as well as the use of pesticides and herbicides without proper signage. The commenter also questions whether current maintenance staff are planting the required plants and/or working a full day. The commenter also mentions Alamo Square, Crissy Field, and Fort Funston, none of which is designated as a Natural Area under the SNRAMP; however, Duboce Park and Alamo Square have designated off-leash DPAs, and Crissy Field and Fort Funston are available for on-leash dog use.

Drainage

While the commenter references parks that are outside of the Natural Areas, for Natural Area parks, the 1995 SNRAMP includes specific policies and/or management actions that serve to control existing drainage, runoff, and/or erosion prevention in Natural Areas. The objectives from the 1995 SNRAMP provide a framework for the general and park-specific recommendations identified in the 2006 SNRAMP. Further, as described on Draft EIR p.89, the NAP staff of 10 gardeners (supplemented by volunteer groups that range in size from 10 to 50 people) conduct routine maintenance within the Natural Areas on a daily basis, which can include, but is not necessarily limited to, a review of sprinkler operations relative to rainfall or other environmental conditions, overall drainage conditions, and mowing lawns. However, all of these maintenance operations, and any resulting effects, represent existing conditions, and do not address impacts of the proposed project.

With respect to the proposed project, the SNRAMP includes erosion control measures to be employed as necessary (see Draft EIR Chapter III, Project Description, pp. 93 to 94) and Draft EIR Mitigation Measure M-HY-1, Implementation of Stormwater Pollution Prevention Measures, p. 366, includes a variety of additional measures that are specifically designed to reduce unintended

drainage channels, erosion, and/or areas of sedimentation caused by implementation of the proposed project. Further, the Draft EIR, on pp. 376 to 382, indicates that there would be no significant programmatic, project-related, or cumulative impacts related to flooding or drainage.

Pesticides and Herbicides

Refer to Response HZ-1, RTC p. 4-531, for a discussion of pesticide use within the Natural Areas.

Maintenance Staff

The effects of a proposed project are only considered significant if there are associated physical effects on the environment. There would be no project-related physical effects on the environment related to plantings that did or did not occur in the past, or with respect to how maintenance workers spent their time in the past while being paid by the City. All of these maintenance-related conditions, and any resulting effects, represent existing conditions, and do not address impacts of the proposed project.

Comment PD-34 Elimination of 18,000 trees

The response to Comment PD-34 addresses all or part of the following individual comment:

Naima-1-05

- > I'm also shocked that the NAP is planning on cutting down 18,000 healthy trees because they are not-native. Sounds very much like something that happened in germany many years ago to non-native peoples. why? are you going to replace them with 18,000 native trees? [Naima-1-05]

Response PD-34

This comment indicates that the Plan would result in the elimination of 18,000 healthy trees and questions whether they will be replaced. This is a comment on the merits of the project and has been forwarded to the SFRPD staff and Commission for their consideration.

Draft EIR Table 5 (provided on p. 114) indicates that of the 117,433 invasive trees located within the Natural Areas (including Sharp Park), 18,448 trees (or 16 percent) would be removed and 98,985 trees (or 84 percent) would remain. Of the 117,433 trees within the Natural Areas, approximately 63,433 trees are located within the City and approximately 54,000 trees are located within Sharp Park. Of the 18,448 trees that would be removed, approximately 3,448 would be removed within the Natural Areas in the City and approximately 15,000 would be removed at Sharp Park. Therefore, the proposed tree removal represents only five percent of all of the trees within the Natural Areas located within the City (calculated as 3,448 trees out of 53,433 trees located within the city [which is 117,433 total trees minus 54,000 trees within Sharp Park]).

As stated on Draft EIR p. 144, at Sharp Park, the SNRAMP would remove approximately 15,000 invasive blue gum eucalyptus of the estimated 54,000 invasive trees to maintain and enhance native

habitats. Further, as stated in SNRAMP Appendix F, p. F-7, at no one location will all the trees, or, for that matter, more than 15 percent of the existing trees be removed from Natural Areas within the city.

As stated on SNRAMP p. 1-3, one of the objectives of the Plan is to identify and prioritize restoration and management actions designed to promote the functioning of San Francisco's native ecosystem, including the maintenance of native biodiversity. In order to accomplish this objective, certain areas would be subject to invasive tree removal that is limited to a prescribed number of acres or trees in compliance with forestry statements (SNRAMP Appendix F). In general, tree removal would be focused on dead or dying trees, trees with disease or insect infestations, storm-damaged or hazardous trees, and trees that are suppressed because of overcrowding.

As stated in Draft EIR Chapter III, Project Description, p. 92, invasive trees that are removed in San Francisco would be replaced with native tree species at a ratio of roughly one-to-one, although not necessarily at the same location or within the same Natural Area. In a memorandum from Lisa Wayne, Open Space Manager, SFRPD, to Jessica Range, Environmental Planner, San Francisco Planning Department,⁵⁵ the SFRPD indicated that each year, the NAP propagates and plants over 10,000 plants in restoration sites throughout the city, with at least 200 of those plants being trees.

4.B.7 Correction to Project Description

Comment PD-35 Draft EIR inaccurately describes the acquisition date for Mori Point

The response to Comment PD-35 addresses all or part of the following individual comment:

NPS-1-15

- General Description (pg. 143): There is a statement that makes reference to the Mori Point site being recently acquired. The property was acquired by the NPS in 2004 and has undergone major restoration efforts, including efforts to enhance habitat for the San Francisco Garter Snake and California Red-Legged Frog. [NPS-1-15]

Response PD-35

The comment corrects information in the Draft EIR regarding the acquisition of Mori Point by the NPS.

The commenter is correct. The text on Draft EIR p. 143 (line 14) has been changed, as follows:

Mori Point, ~~recently~~ acquired by the GGNRA in 2004, borders the southwestern edge, and the Sweeny Ridge GGNRA borders the park on the southwestern and eastern edges.

⁵⁵ Lisa Wayne, Open Space Manger, "Tree Removal and Replacement," memorandum to Jessica Range, Environmental Planner, San Francisco Planning Department, November 27, 2012.

4.C PLANS AND POLICIES [PP]

The comments and corresponding responses in this section cover topics in Draft EIR Chapter IV, Plans and Policies.

Comment PP-1	Consistency with plans and policies
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The response to Comment PP-1 addresses all or part of the following individual comment:

Hayes-1-02

- Furthermore, [the SNRAMP] is consistent with the direction for sustainable management of San Francisco's open spaces as detailed already through the Recreation and Open Space Element (ROSE), the Public Utilities Commission (PUC) water saving mandates, and the City's Sustainability Plan. [Hayes-1-02]

Response PP-1

This comment expresses the opinion that the SNRAMP is consistent with City plans and policies. These comments do not raise any specific environmental issues about the adequacy or accuracy of the EIR's coverage of environmental impacts that require a response in this RTC document under CEQA Guidelines Section 15088.

4.D ENVIRONMENTAL IMPACTS

4.D.1 Land Use and Land Use Planning [LU]

The comments and corresponding responses in this section cover topics in Draft EIR Chapter V, Section V.B, Land Use and Land Use Planning.

Comment LU-1	Applicability of Pacifica Logging Ordinance and San Mateo County Tree Ordinance
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The response to Comment LU-1 addresses all or part of the following individual comment:

SFPGA-3-02

- Implication of Pacifica, San Mateo County, and Local Coastal plans on the logging questions. For the reasons described in paragraph 1 [SFPGA-3-01], it is incorrect to say that the Pacifica Logging Ordinance and the San Mateo County Significant Tree Ordinance are not applicable. Likely one or both plans are made applicable to that part of Sharp Park lying east of the Coast Highway by the Local Coastal Plan. The DEIR acknowledges that logging presents the risk of additional runoff into Sanchez Creek (and hence to Sharp Park Golf Course). Even if this were only a one-time event, this would have potentially significant consequences for the historic golf course, the neighborhoods, and the endangered species habitat. Accordingly, this must be analyzed as a significant risk, and mitigation and avoidance options must be discussed and analyzed. [SFPGA-3-02]

Response LU-1

This comment states that local tree ordinances are applicable to the activities at Sharp Park and requests that the Draft EIR analyze the impacts of downstream flooding as a result of logging activities proposed at Sharp Park.

Under the doctrine of intergovernmental immunity, the City's actions at Sharp Park are not subject to the building and zoning laws of the City of Pacifica or San Mateo County, including the City of Pacific Logging Ordinance (Ordinance No. 636-C.S.) and the San Mateo County Significant Tree Ordinance (Part Three of Division VIII of the San Mateo County Ordinance Code).

The CCC has retained jurisdiction over the portions of the Sharp Park Natural Area and the Golf Course located west of Highway 1; there is no CCC jurisdiction east of Highway 1. Therefore, restoration of the Laguna Salada wetlands, raising and/or narrowing of the fairways, and potential relocation of one or two holes west of Highway 1 could be subject to coastal development permit requirements from the CCC, and any tree removal proposed within the coastal zone would similarly be subject to the terms and conditions of any coastal development permit obtained for those activities.

The potential effects of tree removal on flooding in Sharp Park are addressed in Draft EIR Section V.H, Hydrology and Water Quality, p. 376. The Draft EIR concludes that while removal of eucalyptus trees in the upland area of Sharp Park would increase the rate of runoff into Sanchez Creek, the increase would not be substantial in relation to the size of the drainage area when considering the normal range of runoff volume. The Draft EIR also notes that the area would be revegetated following tree removal and that the long-term effect of the project would be to reduce surface runoff and increase infiltration. Also refer to Response HY-1, RTC p. 4-486. Furthermore, as discussed in Draft EIR Chapter III, Project Description, p. 93, the SNRAMP includes best management practices (BMP) for erosion control which includes the use of straw mulch, rolled erosion control products, wood mulch, silt fences, fiber rolls or straw bales. These erosion control BMPs would be employed as needed to control erosion within the Natural Areas. In addition, the Draft EIR determined that programmatic projects implemented under the SNRAMP, including large-scale tree removal, could result in significant impacts to water quality and identified Mitigation Measure M-HY-1, Implementation of Stormwater Pollution Prevention Measures, p. 366, which requires that programmatic projects implement storm water pollution prevention measures, including among them, a list of erosion and sediment controls. SFRPD would employ applicable erosion control measures into the design of programmatic projects, including large-scale tree removal proposed at Sharp Park. The San Francisco Planning Department would evaluate the proposal and, if applicable, erosion control measures identified in Mitigation Measure M-HY-1 would be implemented. Erosion control measures would further reduce run-off from large scale tree removal activities that were determined to result in less than significant with mitigation flooding impacts on Sanchez Creek.

Comment LU-2 Effects on existing community

The response to Comment LU-2 addresses all or part of the following individual comment:

Borden-1-04

- In Glen Canyon, Natural Areas closed the only trail that enters the park from O'Shaughnessy Blvd., cutting off access for all of the neighborhoods west of the park. That trail started near the end of Del Vale Ave. and dropped down to the Silver Tree day camp facility. The closest entry points to the park are now at Turquoise Way or at Bosworth Street. This is a clear example of how implementation of the NAP has physically divided an existing community. See LU-1 on page 177 of the DEIR. [Borden-1-04]

Response LU-2

This comment expresses concern about the previous closure of a trail at Glen Canyon, asserting that it physically divides an existing community.

The trail to which the commenter refers (at the entry to the park from O'Shaughnessy Blvd.) was closed prior to the commencement of the environmental review for the SNRAMP. This unofficial path was deemed unsafe, due to a significant presence of poison oak. A low post-and-cable fence was installed near Silver Tree camp and day care center to discourage use. This trail closure is not part of the SNRAMP project.

As discussed in Draft EIR Section V.B, Land Use and Land Use Planning, with respect to the broader SNRAMP, none of the proposed activities are anticipated to result in the physical division of an existing community. Although some access points or social trails would be removed, the SNRAMP would maintain public access to all Natural Areas. Therefore, as discussed on Draft EIR p. 177, the proposed project would not result in significant impacts associated with dividing an established community.

Comment LU-3 Effects on existing character

The response to Comment LU-3 addresses all or part of the following individual comment:

DogPACSF-1-16

- The NAP EIR states that impacts to land use planning can be considered significant if they have a "substantial impact on the existing character of the vicinity." (p. 176) In all of its analysis of impacts on the existing character of the vicinity, the NAP EIR never considers the impact on the social community of people who walk with their dogs in the DPAs and portions of DPAs that NAP wants to close. This community, in many cases, defines the "existing character" of the park. Dog walkers are perhaps the most diverse group of park users. If you watch dog walkers in SF city parks, you will see kids and seniors, people with disabilities, gay and straight, every ethnic and religious group, and every socioeconomic class walking, talking and laughing together, all united by their common love of dogs. There

are few places in San Francisco where you will see so many different types of people interacting without rancor. People who walk in the same park at the same time every day know their fellow dog walkers. These friendships extend outside the park into the neighborhoods, helping create the sense of belonging to a community that is so important in today's impersonal urban society. Closures and reductions in DPAs (especially if 80% of the total off-leash space in city parks are closed) will have a significant negative impact on these social communities. DPA closures will destroy these communities. Because the NAP EIR did not consider these impacts on community of those who live near and walk in parks, it is inadequate. [DogPACSF-1-16]

Response LU-3

This comment requests an analysis of impacts on the social community of people who walk with their dogs in the DPAs, suggesting it defines the "existing character" of the park, which is a threshold that the EIR identifies.

As defined under CEQA Guidelines Section 15382, "significant effect on the environment" means a substantial or potentially substantial, adverse change in any of the physical conditions within the area affected by the proposed project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. As such, for the purposes of environmental impact analysis under CEQA, the term "existing character" is taken to mean the character of the physical and land use features within the area affected by a proposed project. The social effects described in the comment, which include negative social effects experienced by people who walk dogs, such as a loss of community, would not be considered a substantial or potentially substantial adverse change on the physical environment. Refer also to Response G-26, RTC p. 4-114, for a more detailed discussion of the manner in which economic or social changes could lead to adverse physical changes to the environment, particularly related to the reduction and closure of DPAs. Comments about the relative merits of the proposed project will be considered by the decision makers as part of their decision to approve, modify, or disapprove the proposed project. That consideration is carried out independent of the environmental review process.

The Draft EIR concludes that because the proposed programmatic projects under the SNRAMP and the Sharp Park restoration project would not result in changes to the existing character of the vicinity, the impact would be less than significant (Draft EIR p. 182).

In addition, the commenter's statement that the SNRAMP proposes to close 80 percent of the off-leash dog space in City parks is incorrect. The SNRAMP proposes to close one DPA, the Lake Merced DPA (approximately five acres) and would reduce the DPA acreage in two other Natural Areas (Bernal Hill and McLaren Park) for a total closure of 19.3 acres of DPAs (or 20.3% of the existing DPA acreage within the Natural Areas). As discussed on Draft EIR p. 258, the DPA at Lake Merced is not heavily used and the Bernal Hill and McLaren Park DPA reductions represent a small

portion of otherwise large DPAs. Further, there are existing DPAs outside of Natural Areas but within other City parks.

The DPAs at Buena Vista Park, McLaren Park, and Golden Gate Park Oak Woodlands are proposed for monitoring. It would be speculative, at this point, to determine the acreage of DPAs that could be reduced or eliminated based on future monitoring reports. Should those DPAs be recommended for closure based on results from monitoring reports, additional environmental review may be required at that time. In addition, on-leash dogs would continue to be allowed access to all Natural Areas. Refer to Response RE-13, RTC p. 4-347, fully describes the on-leash and off-leash areas providing throughout the city and why each of the DPAs would be reduced in size or closed, and Response G-26, RTC p. 4-114, for a discussion of the social impacts of dog ownership and reduced dog play areas.

Comment LU-4 Applicability of San Francisco Urban Forestry and Landmark Tree Ordinances

The response to Comment LU-4 addresses all or part of the following individual comment:

MPIC-2-10

- The MPIC finds the conclusion in the DEIR that converting 10.2 acres of the park from forest to prairie reed grass will have a less than significant impact to be based on inaccurate and incomplete documentation. The DEIR (page 408) states that the total number of trees would not change within the Natural Areas. It further states that San Francisco trees are protected by the San Francisco Urban Forestry Ordinance (page 410). This is inaccurate and inconsistent with Table 5 (page 114), which says that a total of 18,448 trees will be lost in the Natural Areas if the proposed project is implemented. **The DEIR further states that one-for-one replacement trees can be planted anywhere in San Francisco, rather than in the Park or the specific location of trees removed and it specifies replacement of trees removed with slow-growing oaks rather than the historic forest species.** The actual goal of SNRAMP project – to eliminate, not thin or rejuvenate – the historic forests in these parks should be factually stated, although we strongly object to this goal. The DEIR states that no landmark trees will be removed; however, no trees in the SNRAMP areas are currently protected by landmark status. We must ask, do the Urban Forestry or Landmark Tree ordinances even apply to trees in City parks or Natural Areas? If not, references in the DEIR to these ordinances should say so, in order to avoid misleading readers into thinking that these historic trees are eligible for and subject to these protections. [MPIC-2-10]

Response LU-4

This comment requests clarification as to whether San Francisco's Urban Forestry Ordinance applies to trees in City parks or the Natural Areas. As stated on Draft EIR p. 157, this ordinance outlines protections for street trees, significant trees, and landmark trees. More specifically, the Urban Forestry Ordinance includes both Section 806 and Section 810. Section 806 governs the removal of street trees under the Department of Public Works (DPW) jurisdiction, which includes trees on

dedicated public right-of-ways. Section 810, which set forth the landmark tree procedure, can apply to any tree within the territorial limits of the City. Landmark trees have been designated by the Board of Supervisors as special due to the rareness of the species, their size or age, extraordinary structure, ecological contribution, or historical or cultural importance. Trees that are designated by the city for landmark status are protected from physical damage and removal. There is only one designated landmark tree within SFRPD property, a blue elderberry (*Sambucus mexicana*) within the Bernal Hill Natural Area. This tree would not be removed as part of the SNRAMP.

A significant tree, which is described in Section 810A of the Urban Forestry Ordinance, is a tree either on property under the jurisdiction of the DPW or on privately owned-property with any portion of its trunk within 10 feet of the public right-of-way, and that satisfies at least one of the following criteria: (1) a diameter at breast height in excess of twelve (12) inches, (2) a height in excess of twenty (20) feet, or (3) a canopy in excess of fifteen (15) feet. The Director may deem a significant tree a hazard tree if such tree satisfies the provisions of Section 802(o). A landmark tree shall not be treated as a significant tree even if the landmark tree meets one or more of the abovementioned criteria.

Should SFRPD propose the removal of any street tree, significant tree, or landmarks tree subject to the requirements of Sections 806, 810, or Section 810A of the Urban Forestry Ordinance, respectively, the Urban Forestry Ordinance would apply to those trees.

In terms of noticing the removal of street and significant trees, Section 806(a) of the Urban Forestry Ordinance indicates that Public Works shall provide 30 days prior written notice to the owner of the property abutting the affected tree, all interested San Francisco organizations and, to the extent practical, all owners and occupants of properties that are on or across from the block face where the affected tree is located. In addition, 30 days prior to the removal date, a notice shall be posted on the affected tree. If a street tree or significant tree is considered hazardous, the notification timeline is reduced to 15 days. If a street tree or significant tree could cause manifest danger, it can be removed immediately, with noticing occurring after the fact. In addition, if a written objection is received for the removal of any street tree or significant tree, a hearing to consider public testimony concerning the proposed tree removal shall be held. Written notice of the date, time, and place of the hearing shall be posted on the affected tree, provided in a newspaper of general circulation, and sent to the objecting party, the owner of the property abutting the affected tree, and all interested San Francisco organizations, not less than seven days prior thereto.

As outlined in Section 810 of the Urban Forestry Ordinance, the removal of landmark trees shall not be authorized unless certain removal criteria are met (e.g., the tree constitutes a hazard) and written findings are prepared describing the landmark tree and the conditions that require its removal; a public hearing is held; and the same noticing requirements as required for the removal of a street tree or significant tree are provided.

The discussion on Draft EIR p. 157 (in Land Use) was provided to inform readers that there are no inconsistencies between the proposed project and the Urban Forestry Ordinance.

The commenter is correct in that the SNRAMP proposes tree removal and also proposes to replace trees removed in San Francisco Natural Areas (with the exception of the Sharp Park Natural Area) at a one-to-one ratio, but not necessarily in the same location or within the same Natural Area, as described on Draft EIR p. 92.

The discussion on Draft EIR p. 410 regarding the protection of trees under the Urban Forestry Ordinance appears in the cumulative analysis (Impact AF-7). The cumulative analysis determined that other projects, including private development projects, might result in the removal of individual trees and indicates that those trees are protected by the Urban Forestry Ordinance, which requires the replacement of removed trees. Additionally, as required by Public Works Code Section 806(d)(2), new developments are required to have one tree for every 20 feet of street frontage. The analysis concludes that cumulative impacts to forest resources would be less than significant. The text on Draft EIR p. 410 (line 20) has been changed for clarity, as follows:

Further, San Francisco landmark, significant, and street trees are protected by the San Francisco Urban Forestry Ordinance, which requires the replacement of removed trees on a one-to-one basis.

4.D.2 Aesthetics [AE]

The comments and corresponding responses in this section cover topics in Draft EIR Chapter V, Section V.C, Aesthetics.

Comment AE-1	Aesthetic impacts of tree removal
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The response to Comment AE-1 addresses all or part of the following individual comments:

MPIC-1-06	MPIC-2-17	Burgard-1-03
Wade-1-02		

- Furthermore, the project map (see Exhibit A) indicates that areas where tree removal would be concentrated are the most visible areas within the Park, which is a major scenic and historic resource for Park visitors as well as residents of surrounding communities. Clear-cutting these highly visible areas along major trails and sightlines within the Park will be very detrimental to enjoyment of the Park by its users. Of crucial concern is not the impact on views of the forest from outside of the park – shown on page 193-194 of the DEIR, or the impact on distant views to and from the Park, but the view and experience of the historic forest up close from within the Park: along the trails, roads, and historic monuments within the MA-1 and MA-2 areas where substantial tree removal is proposed. [MPIC-1-06]
- While the DEIR acknowledges that Mount Davidson has high natural resource and recreational values for the citizens of San Francisco, including City views, high levels of recreational use, and extensive urban forest, the conclusion that the SNRAMP would have less than significant impact on scenic vistas is incorrect. The DEIR on page 190 states “While

the one-to-one replacement ratio would not increase the total trees present ... in some locations, trees would be replaced by native scrub or grassland species.” This is inconsistent with statements with Table 5, Page 114, and SNRAMP Appendix F page 14 that list a net loss of at least 1600 trees.

In addition to the many references to the importance of beauty as a rationale for saving the forest in the previous section on the history of the park, of crucial concern is not only the impact on views of the forest from outside of the park – pictured on page 193-194 of the DEIR – or the impact on distant views to and from the Park, but the **view and experience of the historic forest up close from within the Park by park visitors**: along the trails, roads, and historic monuments within the MA-1 and MA-2 areas, where substantial tree removal is proposed. This concentrated tree removal, up to 82% of the area around the plateau, road, and Juanita trail, will be extremely noticeable. This impact is significant and should be acknowledged in the final EIR, or the scope of the tree removal should be reduced to prevent this adverse effect on the aesthetic experience inside the forest area of the park.

Tree topping and removal from the MA-1c and MA-2e areas has already resulted in unsightly stumps, remnants, and debris along the most accessible and visible areas in the park, which substantially degrade the visual character of this public park. (See Exhibit B attached). The MPIC requests that any trees killed for SNRAMP be totally removed – all the way to the ground – so that no unsightly stumps are left to negatively impact the aesthetic view from within the park. As demonstrated above, the DEIR’s argument that leaving the trunks will help stabilize the slopes is a scientific fallacy. Also, to date non-native vegetation and tree parts removed by City staff have been left in unsightly debris heaps along the public trails. This significantly negatively impacts the Park as a scenic resource for those wishing to enjoy the beauty of nature along the Park trails. The MPIC requires that the debris created by the SNRAMP maintenance work be collected and dumped away from public view or removed from the park all together. [MPIC-2-17]

- The drastic measure of taking down long standing mature trees to replace them with natives that will take years to establish themselves will undoubtedly have a negative impact on the aesthetics of the park area. Moreover, it will devastate a thriving ecosystem based on the microclimate created by the existing forest. [Burgard-1-03]
- There is also the important visual environment for city dwellers and removal of tall trees (usually eucalyptus are the target) in many parks such as Buena Vista will significantly alter the vistas and unique visual aspects of some of our signature parks. [Wade-1-02]

Response AE-1

These comments suggest that tree removal proposed under the SNRAMP could affect views, scenic vistas, and the aesthetics of park areas and also questions the aesthetic impacts of stumps and vegetative debris. Exhibit A in the first comment above refers to SNRAMP Figure 6.23-5 Management Areas and Trail Plan for Mount Davidson, included in the Draft EIR in Appendix B; Exhibit B in the second comment refers to a photograph titled “Debris and Remnants from Tree Removal,” which appears to have been taken by the commenter.

As discussed in Draft EIR Chapter III, Project Description, pp. 92 to 93, and Draft EIR Section V.C, Aesthetics, pp. 191 and 195, tree removal would be accomplished through selective thinning of individual trees and small clusters of trees rather than clear cutting. Further, tree removal would be conducted over time and not simultaneously in any particular area. Table 5 on Draft EIR p. 114 shows existing trees, trees that would be removed (including approximately 1,600 trees in the Mount Davidson Natural Area), and the resulting number of trees; however, it does not show the precise location of trees that would be replaced on a one-to-one basis because the replacement tree locations have not yet been determined. To make this concept clearer in the Draft EIR, a footnote has been added to Table 5 on Draft EIR p. 114 to indicate that the replacement locations have not yet been determined:

*The total acreages for the management areas do not exactly match the Natural Areas acreages. The Natural Areas acreages are based on vegetation series within each Natural Area where the geographic information system data was precisely clipped to the Natural Area boundary. Management areas were created by mapping their boundaries in the field with a GPS unit. This data was then edited by Natural Areas Program staff to match Natural Areas boundaries. This process created minor errors when the management area appeared to line up with the Natural Area boundary but in fact was off by a small amount. The average error is about 0.1 acre and never more than 0.8 acre. As would be expected, the error is largest in the larger Natural Areas because they have relatively longer boundaries.

**The SFRPD would monitor dog use and impacts on oak woodlands at Buena Vista and Golden Gate Park Oak Woodlands and impacts on small wildflower meadows in McLaren Park.

***Glen Canyon Park and O'Shaughnessy Hollow are two different Natural Areas; they are grouped together in this table, as they are in the SNRAMP.

****The acreage of the management areas within McLaren Park have been revised to reflect the exclusion of a portion of the Amazon Reservoir Tract that is under the jurisdiction of the SFPUC. Information regarding the number of trees, trails, or DPAs within the SFPUC Amazon Reservoir Tract and SFRPD McLaren Park is not available.

Note: All trees removed would be replaced, although not necessarily with the same species or within the same Natural Area.

Trees would be removed through selective thinning or in small clusters and would be replaced with native vegetation, either grassland or scrub vegetation. Draft EIR p. 191 acknowledges that tree removal would be noticeable and include diminished number of trees and an altered composition and structure of vegetation. The Draft EIR concludes that the proposed tree thinning would not substantially damage scenic resources because (1) the overall visual character of the affected areas would remain intact; (2) no landmark trees would be removed; (3) trees would be removed gradually over time, thereby making the loss of trees visually less perceptible; (4) trees that are removed would be replaced, although not necessarily within the same location or with the same species; and (5) where trees are replaced with scrub or native grasslands, the relatively short maturity time of these habitats reduces the time required for the area to become revegetated. The above factors collectively reduce the overall visual effect of proposed tree removal activities and, as shown in Figure 6, Mount Davidson at Edgehill Way, Draft EIR p. 194, the visual impact of tree

removal activities at Mount Davidson from long-range vantage points would be virtually unnoticeable. The Draft EIR does analyze the visual effects of tree removal from close-range vantage points (Draft EIR p. 195) and concludes that while the visual impact of tree removal from inside the Natural Areas would be more noticeable than impacts from long-range view points and include openings in the forest canopy as well as a change in vegetative structure, tree removal is not expected to result in a demonstrable adverse change and impacts to scenic resources would be less than significant. Also see Response AE-3, RTC p. 4-224.

Forest thinning results in an increase in the average diameter of the residual trees, promotes tree growth, and improves forest health through the removal of suppressed trees. More importantly, thinning allows promotion and establishment of a native understory and diversity and decreases the site dominance of invasive tree species, improving the overall health of the forest by relieving overcrowding and promoting habitat for a large array of wildlife.⁵⁶

Typically, trees would be removed limb-by-limb, rather than felling an entire tree; limb-by-limb removal techniques would always be applied in areas adjacent to other trees or sensitive habitat unless this technique is not feasible or practical from a safety perspective. Tree removal would be conducted manually by someone climbing the tree or someone on a mechanical cherry picker next to the tree. If tree removal occurs in an area that is roadway-accessible, the limbs and trunk sections typically would be transported from the area by a flatbed truck, preferably for use in other areas onsite. If onsite use is not available or practical, the removed tree materials would be transported to SFRPD's green waste/composting facility in Golden Gate Park or to Recology's green waste site on Tunnel Road when SFRPD facilities cannot accommodate the debris. Greenwaste generated at Sharp Park would be transferred to the Sharp Park organic dump. Where removal of tree materials is not possible, the limbs and trunk sections would be left in place on the ground in a manner that protects trail access. As stated on Draft EIR p. 93, Section III, Project Description, tree removal would leave the tree stump and root ball intact to hold the soil and minimize subsurface disturbance. Stumps may be ground to below grade where necessary to avoid tripping hazards and erosion impacts. Refer to Response AE-2, RTC p. 4-223, for a discussion of the aesthetic impacts of brush piles and remnant plant materials (stumps and debris).

In addition, larger scale tree removal activities (defined on Draft EIR p. 93 as tree removal exceeding 0.5 acre or more than 20 trees on average) may require subsequent project-level environmental review to determine whether the project would result in any significant environmental impacts not identified in this EIR. Generally, SFRPD would spread tree removal across targeted portions of Natural Areas and would not concentrate tree removal activities in a particular location. Larger-scale tree removal (that exceeds half an acre or on average more than 20 trees), identified and analyzed as long-term programmatic projects in this EIR, would remove trees within urban forests

⁵⁶ <http://sfrecpark.org/parks-open-spaces/natural-areas-program/natural-areas-faqs/>, accessed on August 6, 2014.

(MA-2 and MA-3) over time and not simultaneously in one portion of a Natural Area. The SFRPD's Tree Removal Procedures require that all trees designated for removal have a notice posted at least 30 days before removal. While individuals and neighborhood organizations are not notified directly of the proposed removals, the posting includes a contact number for questions or concerns, which allows the public an opportunity to provide additional comment. Further, no trees are to be removed during this 30-day period. In addition, the Urban Forestry Ordinance has noticing requirements for the removal of street trees, significant trees, and landmark trees; however, as stated on Draft EIR p. 157, no landmark trees are proposed for removal under the SNRAMP. The comments have not presented substantial evidence that proposed tree removal activities would result in a more severe or significant, aesthetic impact than that disclosed in the EIR.

In a memorandum from Lisa Wayne, Open Space Manager, SFRPD, to Jessica Range, Environmental Planner, San Francisco Planning Department,⁵⁷ the SFRPD indicated that each year, the NAP propagates and plants over 10,000 plants in restoration sites throughout the city, with at least 200 of those plants being trees.

Comment AE-2	Aesthetic impacts of brush piles and brown vegetation
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The response to Comment AE-2 addresses all or part of the following individual comments:

DogPACSF-1-21	MPIC-1-09	SFDOG-2-22
Bartolotta-1-20	Brown-1-18	Hess-1-05

- The NAP EIR does not consider the negative impact on aesthetics of NAP management decisions. For many people, brush piles used in natural areas look like accumulations of trash and are aesthetically unpleasing. For many people, shaded areas with tall, non-native trees are aesthetically pleasing, while areas without tall trees are less so. People like to see their parks green not brown half the year. Because these impacts were not considered, the NAP EIR is inadequate. [DogPACSF-1-21] [SFDOG-2-22] [Bartolotta-1-20] [Brown-1-18]
- Finally, tree removal from the MA-1c and MA-2e areas as part of building and native plant restoration has already left unsightly stumps, remnants, and debris along the most accessible and visible areas inside the forest sectors of the park (See Exhibit B attached). The MPICs require that any trees killed for SNRAMP be totally removed – all the way to the ground – so that no unsightly stumps are left to negatively impact the aesthetic view from within the park. Also, non-native vegetation and tree parts removed by City staff thus far has been left in unsightly debris heaps along the public trails. This significantly negatively impacts the Park as a scenic resource for those wishing to enjoy the beauty of nature along the Park trails. The MPIC requires that the debris created by the SNRAMP project be collected and dumped away from public view or removed from the park all together.

⁵⁷ Lisa Wayne, Open Space Manger, "Tree Removal and Replacement," memorandum to Jessica Range, Environmental Planner, San Francisco Planning Department, November 27, 2012.

Furthermore, any trees cut down should be completely removed to ground level and all remnants taken away in order to maintain the aesthetic quality of the forest and park. [MPIC-1-09]

- (5) In our conversations with Greg Gaar of NAP he was not provided an answer to our question regarding whether tree stumps will be removed immediately if at all. Leaving behind stumps would certainly blight the area. [Hess-1-05]

Response AE-2

These comments suggest that the Draft EIR does not consider the aesthetic impacts of brush piles, brown vegetation, and remnant plant materials (stumps and debris). Exhibit B (provided as part of Comment MPIC-1-09) depicts a portion of the Mount Davidson Natural Area after tree removal activities showing an open canopy and debris pile.

As discussed on Draft EIR p. 188, a visual quality analysis is somewhat subjective and considers the project in relation to the surrounding visual character. Visual impacts would be considered significant if the proposed project were to result in a substantial demonstrable adverse change. Impact AE-4, Draft EIR pp. 191 to 195, provide examples of activities under the proposed project that could affect scenic resources within the Natural Areas, including contouring the topography of an area differently, and removing and replanting shrubs, bushes, grasses and trees. Impact AE-8, Draft EIR pp. 197 to 198, describes routine maintenance activities that could affect the visual character or quality of the Natural Areas, including invasive weed and tree removal, planting of vegetation, and maintenance of trails, catchment basins, and sediment dams. The effects related to the placement of brush piles and other remnant plant materials on scenic resources and the visual quality and character of the Natural Areas would be similar in nature, extent, and magnitude to the effects of the types of activities described in the Draft EIR under Impact AE-4 and Impact AE-8. While the aesthetic impact of large woody debris piles and brown vegetation, as described by the commenter, may be considered adverse to those sensitive to visual changes, the Draft EIR determined that changes to the visual character of the Natural Areas would be less than significant. With respect to brush piles specifically, the visual impact of brush piles would be temporary and would diminish as replanted vegetation matures, or as brush piles decompose. Additionally, because these activities already occur within the Natural Areas, the project would not substantially damage scenic resources or substantially degrade the visual character or quality of the affected sites or surroundings. Debris from vegetation removal is typically used for wildlife habitat enhancement, erosion control, or trail maintenance. Any large woody debris not used for these purposes would be transported and composted at either Golden Gate Park, Recology's Green Waste Facility on Tunnel Road, or in the case of Sharp Park, at the Sharp Park organic dump.

As discussed in Draft EIR Chapter III, Project Description, p. 93, to minimize subsurface disturbance, tree stumps and root balls would be left intact unless they pose a tripping hazard, in which case they

could be ground to below grade. The text on Draft EIR pp. 191 and 197 has been changed, as follows:

- Draft EIR p. 191 (line 14):

The proposed project would alter scenic resources within the Natural Areas. This would involve, for example, placement of brush piles and large woody debris, contouring the topography of an area differently and removing certain invasive vegetation to enhance habitat and establish native vegetation.

- Draft EIR p. 197 (last paragraph):

Routine maintenance activities involving invasive weed and tree removal, placement of brush piles and large woody debris, plantings, and maintenance of trails, catchment basins, and sediment dams are described in Section III.F.2.

Comment AE-3	Tree removal simulations
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The response to Comment AE-3 addresses all or part of the following individual comments:

Bose-1-06

Bowman-2-04

- Pg. 192-193: Pictures purporting to show the before and after effects of tree removal are the same pictures with superimposed red ovals. This cannot be considered a good-faith effort to show the impact of tree removal. [Bose-1-06]
- Real depictions should be used to demonstrate the results of the deforestation on the Natural Areas instead of the unrealistic and misleading pictures used for Impact AE-4 in the DEIR, which don't show the removal of any trees particularly for visitors within the park. Because the aesthetics of a park are so significant to visitors and has been highlighted by speakers at many public meetings, the aesthetics environmental impact section should also include realistic pictures, such as those from Pine Lake, that demonstrate realistic changes that will result from the adoption of the SNRAMP. [Bowman-2-04]

Response AE-3

These comments suggest that the before and after photographs of tree removal are unrealistic and misleading.

The photographs used for the visual simulations (Draft EIR pp. 192 to 194) are from public viewing locations. All viewpoints were chosen from public rights-of-way that gave the best overall perspective of the landscape. With respect to Mt Davidson, the viewpoints that were chosen were higher in elevation so that the entire hill could be seen, as well as the area anticipated to have the most tree removals. At Sharp Park, the most frequently used public access area is the seawall on the western side of the property, which is also the area with best view of the tree removal areas.

The photo simulations were prepared using accepted methodologies for CEQA aesthetic impact analysis and reflect the anticipated effects of the proposed tree removal based on the project description. As described on Draft EIR pp. 185 to 198, the visual simulations illustrate the long-term

changes to the landscape from scenic vista points, including both tree removal and replanting over 20 years. As discussed in the Draft EIR, tree removals are not anticipated to be concentrated in any one area; further, intact forest would remain surrounding the tree removal areas, and the tree removals would occur over time. Because there would be minor changes in tree canopy as seen from these public viewing locations, “ovals” were used in the EIR figures to help the reader identify these locations, which also supports the conclusion in the Draft EIR that most of the impacts of tree removal would be indistinguishable from distant viewpoints.

The aesthetic experience and views from inside some Natural Areas could change as a result of tree removal described in the proposed project. Over time, blue gum eucalyptus trees would be replaced with smaller statured trees and shrubs. However, as stated on Draft EIR p. 195, the overall vegetated character of the areas would be retained. In order to clarify, the first partial paragraph on Draft EIR p. 195 is revised as follows:

From close-range locations, the aesthetic experience for some visitors using trails in Natural Areas would change in some locations as some plants are removed and others planted. For example, areas where blue gum eucalyptus trees would be removed and replaced with smaller statured trees and shrubs would appear different over time. However, landscapes in the Natural Areas change over time, and the overall vegetated character of the areas would be retained.

Comment AE-4	Impacts of fence on Sharp Park berm
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The response to Comment AE-4 addresses all or part of the following individual comments:

Bowman-1-04

Lorenz-1-03

- The EIR does not account for the significant impact on the aesthetics and land use at Sharp Park. I often talk to people that have been going there for 30 some years, and the berm is definitely as much of the historic value of the Sharp Park as the golf course. The fence is ugly and creates a psychological barrier between the people on the berm and the golf course that completely changes the aesthetics for the hundreds of people that walk along the berm each day. This change is not even recognized as such in the EIR.

As a frequent walker and runner with my dog and family at Sharp Park, I am quite concerned about the ugly fence that was installed, the potential of a permanent barrier, and prohibiting people and dogs from the lagoon. Before the addition of the ugly fencing along the berm, the lagoon was a favorite end to our runs and a lovely quiet magical place. [Bowman-1-04]

- We also frequently visit Sharp Park, and the EIR does not address the significant impact of the unsightly fence and the proposed barrier between the golf course and the berm. People have been enjoying a small portion of the lagoon for generations and that is part of the historic design of the course. Just because the walkers aren't organized is no reason to ignore the aesthetic and usage impact of this major change to the park's design and usage. From what I observe, more people use the berm for recreation than use the golf course, and the

berm is just as important to aesthetics and recreation as maintaining any other historical aspect of the course.

The EIR needs to do a comprehensive evaluation of the addition of any barrier and not present it as not having any impact. [Lorenz-1-03]

Response AE-4

These comments indicate that the Draft EIR does not account for significant impacts on recreation, aesthetics, and land use at Sharp Park, particularly an existing temporary fence that was previously been installed.

The temporary fence that the commenter mentions has been replaced with another temporary fence that is made of galvanized mesh with wooden posts. The purpose of this fence is to limit access to sensitive species habitat in compliance with the Biological Opinion for the Sharp Park Pumphouse Project and to discourage human and pet intrusion into the restored habitat area. This fence is located along the top of the seawall, just east of the existing trail, running the entire length of the SFRPD property. After Hole 12 is closed and restored as coastal scrub/grassland habitat to support the San Francisco garter snake, the temporary fence would be removed and a permanent post-and-rail (or split rail) fence would be installed. The permanent post-and-rail fence would encircle the lagoon, as illustrated by Figure 3 of the Draft EIR, and would similarly limit access to sensitive species habitat in compliance with the Biological Opinion for the Sharp Park Pumphouse Project.

Draft EIR p. 196 discusses impacts of the proposed Sharp Park restoration activities on the visual character and quality of the environment. Draft EIR p. 196 states that:

“The proposed project would alter scenic resources, for example, by recontouring some of the golf course holes and portions of the wetland complex and by converting vegetated areas to open water habitat. Changes in vegetation include removing certain invasive vegetation to enhance habitat and establish native vegetation. Changes to scenic resources involving vegetation would be noticeable and include diminished vegetation cover and altered composition and structure. These adverse impacts on scenic resources would diminish as the planted vegetation matures. Establishing more locally-native vegetation as a result of the Sharp Park restoration would improve scenic resources by emphasizing mature native vegetation more consistent with the local native landscape desired by the Natural Areas Program. Also, because the vegetation is better suited to local conditions, it is expected to require less maintenance and, therefore, less intrusion on the natural landscape by maintenance personnel and equipment. As a result, there would be *less than significant* impacts on scenic resources from Sharp Park restoration.”

The analysis goes on to say that “After implementation of projects under the SNRAMP, the overall visual setting of the Natural Areas would still be characterized as undeveloped, used for various designated purposes, and surrounded by an urban environment. However, during construction, the visual setting of the Natural Areas would be altered by the presence of construction equipment. Construction-related impacts are short term, temporary and would not result in long term adverse

impacts to the visual character of the Natural Areas.” This analysis specifically focused on the visual changes resulting from the primary restoration activities (including dredging Laguna Salada, recontouring the shoreline, creating a habitat corridor and upland habitat). The replacement of the existing temporary fence with a permanent post-and-rail fence would not constitute a substantial change from existing visual conditions, which provides the baseline against which potential impacts are evaluated; the analysis and conclusions provided in the Draft EIR covers this activity. Also, refer to Response CP-4, RTC p.4-255, for discussion of impacts related to installation of the post-and-rail fence on historic resources.

Comment AE-5 Analysis of proposed tree management at Grandview Park

The response to Comment AE-5 addresses all or part of the following individual comment:

GGHNA-1-03

- The analysis of impacts from NAP tree management is inadequate...

The NAP EIR does not adequately consider the impacts on aesthetics, or on wind and impacts of wind on neighboring properties, or on the trees themselves of the extensive “limbing” planned by NAP staff.

Grandview Park is one of the few parks where tree removal is planned by the NAP. The people in our neighborhood have always loved the trees atop Grandview. Indeed, our association initially formed to fight development of Grandview Park, and the park and its trees make up our logo. We have expressed repeated concerns about the removal of any trees in Grandview, especially since there are so few remaining. At a March 2010 public meeting on the Grandview Trail Restoration Project, attendees were told there would be no tree removals at Grandview. Then, when the final Trail Restoration Project was announced several months later, it included removing “hazard” trees. While we support removing hazardous trees because of public safety concerns, we are concerned about the mixed messages we have gotten from RPD and our inability to find out what will really be done.

The Trail Restoration Project released in 2010 indicated that NAP will “limb” the remaining cypress and eucalyptus trees in Grandview, with no indication of how much pruning would actually be done. We have seen at other parks, such as Tank Hill, that this “limbing” can be extreme, resulting in ugly-looking trees that appear misshapen and do little to slow down the wind. The NAP EIR does not adequately consider the impacts on aesthetics, or on wind and impacts of wind on neighboring properties, or on the trees themselves of the extensive “limbing” planned by NAP staff. [GGHNA-1-03]

Response AE-5

These comments indicate that the Draft EIR does not adequately consider impacts related to aesthetics, wind, and tree removal at Grandview Park.

As shown in Table 5 on Draft EIR p. 114, Grandview Park currently has a total of 25 blue gum eucalyptus and cypress trees. The SNRAMP proposes to remove five of these nonnative trees.

Following tree removal, 80 percent of the nonnative trees would remain. The scale of this activity is not sufficient to substantially alter the visual character or quality of the Natural Area and would have little effect, if any, on wind conditions for neighboring properties. The commenter does not provide evidence to support the claim that the EIR does not adequately consider aesthetic and wind impacts associated with limbing and other tree removal.

As part of routine maintenance activities described in the Draft EIR, SFRPD staff may prune existing trees. Because SFRPD staff routinely prunes trees, tree pruning would not constitute a substantial change from existing conditions, and Draft EIR p. 196 concluded these maintenance activities would result in no impact. While aesthetic impacts can be subjective, because tree removal would not result in a demonstrable adverse change, the Draft EIR concludes in Impact AE-8 (on Draft EIR p. 195) that routine maintenance would not sufficiently degrade the visual character of the Natural Area.

The impacts associated with wind from routine maintenance activities are discussed in Draft EIR Section V.E, Wind and Shadow. Draft EIR pp. 244 to 251 analyzes the proposed project's potential to affect wind conditions, including alterations in wind patterns and impacts of ground-level wind hazards on pedestrians. While this analysis specifically focuses on those natural areas where more tree removal is proposed, removal of five trees would result in substantially less wind impacts than those described in the Draft EIR for other Natural Areas.

As discussed in Draft EIR Section V.E, Wind, tree removal would not substantially change wind patterns; therefore, Draft EIR p. 389 concludes that tree removal under the programmatic projects would result in less than significant windthrow effects on public safety. In general, tree removal would be focused on dead or dying trees, trees with disease or insect infestations, storm-damaged or hazardous trees, and trees that are suppressed because of overcrowding. Removing trees may benefit public safety because damaged and dying trees may be at greater risk of falling and injuring visitors or residents. Draft EIR pp. 248 and 249 similarly concludes that because the bulk of the tree stands would remain intact, tree removal would not result in significant windthrow impacts.

The Grandview Trail Restoration Project, to which the commenter refers, was approved by the San Francisco Parks & Recreation Commission on July 15, 2010 and has since been completed; it is a separate and independent project from the project and activities proposed under the SNRAMP. The management actions proposed at Grandview Park under the SNRAMP are primarily focused on routing users away from eroding areas and sensitive habitats to designated trails, and installing soil retaining boxes on the downhill side of the landings to help minimize erosion.

Comment AE-6 Impacts of poor maintenance

The response to Comment AE-6 addresses all or part of the following individual comments:

SFFA-3-21

Bartolotta-1-19

Jake-1-09

■ 6. Poor Maintenance

The 2012 work plans for the Natural Areas Program (see Attachment IV-A, obtained by public records request) help us to understand why the natural areas are such a mess. The work plans inform us that NAP and its volunteers and contractors plan to spend a total of 358.5 days taking care of 1,075 acres of natural areas in 2012. Each acre of natural area will therefore receive one-third of one day of maintenance for the entire year. Some natural areas have not been scheduled for any maintenance and several as few as one day for the entire year.

There are countless stories of volunteers who spent long hours planting in NAP areas, only to see absolutely no maintenance performed once the plants were in the ground. Not surprisingly, many of these plants die, creating unsightly vistas of dead or dying plants. People are much less likely to want to walk in natural areas that are poorly maintained, a negative impact on recreation that is not addressed in the DEIR.

Poor maintenance is important because NAP is exempt from the Maintenance Standards mandated by Proposition C passed by San Francisco voters in 2003. Prop C required the Recreation and Park Department, with help from the Controller's Office, park advocates and the general public, to develop maintenance standards for parks. The standards define the desired conditions of park features such as lawns, trees, and trails, and are used to assess and evaluate conditions in San Francisco parks each year. In the San Francisco Park Maintenance Standards Manual (August 2006), there is a single maintenance standard for open space-cleanliness, defined as: "From a 10 feet distance (i.e., from the nearest path), open space is free of litter and debris." The manual goes on to say that the standard is met if no more than 15 pieces of litter are visible in a 50' by 50' area or along a 200' line, and that the standard is not met if needles, condoms, broken glass, and/or feces are present.

Certainly people in natural areas, including those walking on trails, have a right to expect the natural areas to meet such a simple cleanliness standard. However, the Manual goes on to say: "Open space-natural areas are not included in this standards manual, and therefore, are not inspected." The DEIR should consider the impact on aesthetics and recreation of the woeful lack of maintenance in natural areas.

The final EIR should also consider the mitigation of scaling NAP back to a few areas that it can adequately maintain with its existing staff and budget, compared to the current plan to spread maintenance hours so thin because they are trying to cover too many natural areas. One of many reasons why the Natural Areas Program is controversial is that it is too big. It has claimed hundreds of acres in which there were no native plants whatsoever. It has bit off more than it can chew. Much of what is now on its plate should be taken back and returned

to its “natural state,” i.e., without pesticides, without fences, without moonscapes created by eradicating existing vegetation.

Conclusion

The final Environmental Impact Report for the SNRAMP must:

- > **Analyze impacts on aesthetics and recreation of poor maintenance of natural areas** [SFFA-3-21]
- The NAP EIR does not adequately consider the negative impacts on aesthetics and land use of poor maintenance in natural areas. In most parks, the NAP plan allocates fewer than 20 days/year for planting/maintenance of the natural areas. In 16 of the 32 natural areas, the total maintenance planned is 10 or fewer days each year. There are countless stories of volunteers who have spent long hours planting native plants in NAP areas, only to see absolutely no maintenance performed once the plants are there. Without maintenance, the plants die, creating unsightly vistas of dead and dying plants. The NAP EIR should have considered the impacts of scaling back the program to a few areas that can be well maintained, as opposed to the current plans to take over one-quarter of San Francisco’s city parkland. The NAP plan is more ambitious in the amount of work to be done annually than NAP has demonstrated it has the capacity to actually DO on a consistent basis. [Bartolotta-1-19]
- The NARMP EIR does not adequately consider the negative impacts on aesthetics and land use of poor maintenance in natural areas. As a search in the entire EIR for relevant words (finance, financial, budget) provides only a few results, it is evident there is no rigorous financial analysis of anything. This failure to consider costs of usage changes can lead to serious adverse environmental impacts. [Jake-1-09]

Response AE-6

These comments suggest that SFRPD staff (along with volunteers) have not adequately maintained Natural Areas, which has led to the existing adverse impacts on aesthetics and recreation.

Consistent with standard CEQA practice, the Draft EIR assumes implementation of the proposed management actions, including maintenance actions, as presented in the project description. The proposed project consists of both programmatic and project activities to be implemented at each of the existing Natural Areas; it does not propose to convert additional portions of San Francisco parkland to Natural Areas with the exception of portions of the Sharp Park Golf Course that would be converted to a Natural Area following restoration activities (also see Response PD-12 on RTC p. 4-168). Generally, the level of daily routine maintenance under the proposed project would be similar to the activities currently conducted by the NAP because, as described in Draft EIR Chapter III, Project Description, p. 89, the NAP staff is composed of biologists, ecologists, and natural resource managers that conduct routine maintenance within the Natural Areas on a daily basis. The NAP staff of approximately ten gardeners would continue to conduct the management actions within the Natural Areas; therefore, existing staffing levels are anticipated to be similar to

current levels, and maintenance activities are not expected to increase substantially. The NAP also utilizes volunteer groups that range in size from 10 to 50 people; therefore, it is not anticipated that routine maintenance activities, which are substantially similar to current activities, would result in a need for SFRPD to hire additional staff. As also discussed on Draft EIR p. 89, larger projects, identified as programmatic projects in the Draft EIR, would be implemented by the SFRPD's Capital Division.

The aesthetic impacts from routine maintenance would be unlikely to change under the SNRAMP; therefore, the proposed maintenance actions under the SNRAMP would not represent a substantial change from baseline conditions. The purpose of this EIR is to evaluate the impacts of the project as compared to baseline conditions, and if the maintenance activities remain the same under the project (the SNRAMP) as compared to what currently occurs, significant project-related impacts would not result, which is what the EIR concluded. The Draft EIR determined that routine maintenance would have less than significant aesthetic impacts (refer to Draft EIR pp. 190, 195, and 197).

Consistent with the commenters suggestion to scale back the NAP, the No Project Alternative and the Maintenance Alternative identified in the Draft EIR both consider the effects of reduced management actions relative to the proposed project (refer to Draft EIR pp. 468 and 513). The Draft EIR concludes that neither of these alternatives would have a significant impact on aesthetic resources relative to existing conditions.

The SNRAMP does not propose any change in the total acreage aside from a minor increase at Sharp Park due to the Restoration Project of Natural Areas as compared to existing conditions. In fact, aside from Sharp Park, the acreage of Natural Areas would remain the same under all of the alternatives, whether No Project, Maximum Recreation, Maximum Restoration, or Maintenance; the only difference would be the activities that occur within the existing Natural Areas. Refer also to Response G-4, RTC p. 4-29 for a discussion of the financial considerations associated with the SNRAMP.

4.D.3 Cultural and Paleontological Resources [CP]

The comments and corresponding responses in this section cover topics in Draft EIR Chapter V, Section V.D, Cultural and Paleontological Resources.

Comment CP-1 Support determination that Sharp Park Golf Course is a historical resource

The response to Comment CP-1 addresses all or part of the following individual comments:

BDunes-1-01	GCSAA-1-01	GHCC-1-01
NGCOA-1-01	PGA-1-01	SFPGA-1-01
SFPGA-2-01	SFPGA-2-02	SFPGA-2-03
SFPGA-2-04	SFPGA-2-06	Bowman-1-05
Gleichenhaus-1-01	Horn-1-01	Lee-Y-1-01
Levins-1-01	Links-1-01	Links-2-01
Mansbach-1-01	Tully-1-01	PH-Bryant-01
PH-Links-01	PH-Mozingo-02	

- I am writing to express my complete and enthusiastic support for designating the incomparable Sharp Park Golf Course a “historical resource.” Its architect, Alistair MacKenzie, is one of the great masters of the 700 year old craft and Sharp Park is one of his masterpieces. It is truly a work of living art. As the owner of two golf resorts, Bandon Dunes in Bandon, Oregon and Cabot Links in Nova Scotia, I have a very strong opinion that Sharp Park should not only be preserved but maintained to the very highest standard. [BDunes-1-01] [SFPGA-2-01]
- On behalf of the Golf Course Superintendents Association of America (GCSAA) I am writing in support of the “historical resource” designation for the Sharp Park Golf Course. Sharp Park Golf Course is a historical and cultural resource, and is recognized as such by local, state and national entities. Not only was Sharp Park designed by Alister MacKenzie, one of the greatest golf architects of all time, but it is also unique because it is one of the few municipal courses he designed.

Thank you for your time and for allowing GCSAA to express support of the San Francisco Planning Department’s determination that Sharp Park Golf Course, designed by Alister MacKenzie and opened for play in 1932, is a “historical resource” under the California Environmental Quality Act. [GCSAA-1-01]

- Sharp Park Golf Course is one of only a handful of golf courses that the general public can play that was designed by the worlds most famous golf architect, Dr. Alister MacKenzie. It is indeed a national treasure, and although only 14 of the original MacKenzie holes remain they are indeed MacKenzie “gems”. Sharp Park opened to great fanfare 80 years ago and MacKenzie was so proud of the layout that he highlighted it in his book “The Spirit of St. Andrews.”

There are amazing parallels that Sharp Park shares with a nearby MacKenzie designed course, Green Hills Country Club (Originally the Union League Golf and Country Club of San Francisco). Green Hills was designed by Alister MacKenzie and was formerly the site of an orchard, where flowers were grown and used by John MacLaren for the 1915 Worlds Fair. John Maclaren hired Alister MacKenzie to design Sharps Park. John Maclaren, one of the most famous horticulturists of the time, planted the cypress trees that line the fairways of

Sharp Park. Similar Cypress trees are present at Green Hills. Green Hills original clubhouse was designed by Willis Polk Architects, a company that helped to restore much of San Francisco after the great earthquake and fire of 1906. The architect that designed the original Green Hills clubhouse for Willis Polk was Angus McSweeney. Sharp Park's clubhouse was also designed by Angus McSweeney.

When Green Hills was opened in 1930 MacKenzie praised the layout and called it one of the best golf courses on the west coast. Interestingly, when MacKenzie wrote the "Spirit of St. Andrews" Green Hills was only mentioned in one sentence. On the other hand Mackenzie devoted much of a chapter to his pride in Sharp Park and the seaside links design philosophy. This public golf course was indeed one of the works MacKenzie was most happy with in California (which is significant when one looks at the magnificent layouts, almost all private, that he is responsible for. They include Cypress Point, The Valley Club, The Meadow Club, Green Hills, Pasatiempo and others).

Those that say that Sharp Park is no longer a MacKenzie layout are grasping at straws. Fourteen of the original holes are still in use (two modified somewhat) and the four replacement holes to the east of Highway One were designed by Fleming.

Closing Sharp Park would be a travesty and would forever prevent the average person from playing golf at a course designed by the worlds most famous golf architect. [GHCC-1-01]

- We are writing to you to inform you that we support the proposed designation of Sharp Park Golf Course as a historical resource of the City and County of San Francisco. As you know, this course was one of the final designs by Alister MacKenzie prior to his death. He is regarded by many as the finest golf course architect in the history of the game with courses like Augusta National and Pasatiempo in Santa Cruz to his credit. Unlike those courses, Sharp Park is affordable and accessible to people from all walks of life from the community and beyond. There have been many great players like San Francisco's own Ken Venturi and Johnny Miller who developed their games on municipal courses. Take away the public course option and many great and not so great players will never have the chance to pursue this great lifetime sport. In an urban environment, golf courses provide a unique venue for healthy outdoor recreation. Unlike other sports, golf is one that can be pursued by anyone regardless of age, size, or speed. Entire multi-generational families can play this game together. [NGCOA-1-01]
- We are writing to you today to voice The PGA of America's wholehearted support for the proposed designation of Sharp Park Golf Course as a historical resource of the City and County of San Francisco. [PGA-1-01]
- The San Francisco Public Golf Alliance supports the determination¹ of the San Francisco Planning Department that Sharp Park Golf Course (hereinafter "Sharp Park," or "golf course"), designed by Dr. Alister MacKenzie and opened for play in 1932, is an "historical resource" under the California Environmental Quality Act.²

I. SHARP PARK GOLF COURSE MEETS CEQA CRITERIA FOR “HISTORICAL RESOURCE” DESIGNATION

Sharp Park Golf Course is a well-known Pacifica historical site. Both the golf course and its clubhouse are separately identified as “historical sites” by the City of Pacifica³ General Plan, adopted in 1980.^{4,5} The Pacifica Historical Society, official historian of the City of Pacifica, by unanimous resolution dated June 14, 2011, designated Sharp Park Golf Course as an “historical and cultural resource”.⁶

The golf course is also nationally recognized as one of America’s “culturally significant landscapes at risk for alternation or destruction,” by the Cultural Landscape Foundation of Washington, D.C.’

The criteria for a property to be designated as an “historical resource” under the California Environmental Quality Act, as set forth in 14 California Code of Regulations, Section 15064.5(a)(3), include the following:

“(A) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage” and

“(C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.”

1. Sharp Park is the work of Master Architect Dr. Alister MacKenzie

Sharp Park meets the criteria as “historical resource” under CCR 15064.5(a)(3)(C), because it was designed by Dr. Alister MacKenzie, the best-known, most influential, and arguably the greatest golf architect in history.

His other courses include Augusta National, home of the annual Masters Tournament, and the Cypress Point Club on the Monterey Peninsula; these two courses are currently ranked as No. 1 and No. 4 on Golf Digest Magazine’s list of “America’s Greatest Courses.”^{1°} A third MacKenzie course – Royal Melbourne in Australia--is regularly mentioned with Augusta and Cypress among the 10 “greatest” golf courses in the world. Dr. MacKenzie was the first architect inducted into the World Golf Hall of Fame, and is recognized by golf architecture authorities as the historic architect who had the greatest influence on modern golf course design.

Dr. MacKenzie proclaimed his design principles in two books: “Golf Architecture” (1920), and “The Spirit of St. Andrews” (published posthumously, 1995). In a nutshell, Dr. MacKenzie prescribed that golf should be both challenging and enjoyable by players of all abilities, and that the golf course itself should be beautiful. “while always keeping uppermost the provision of a splendid test of golf, I have striven to achieve beauty,” Dr. MacKenzie said. “This excellence of design is ... constantly exercising a subconscious influence upon [the golfer] and in course of time he grows to admire such a course as all works of beauty must be eventually felt and admired. “

Dr. MacKenzie explained that he left the practice of medicine for golf architecture, out of a “firm conviction of the extraordinary influence on health of pleasurable excitement, especially when combined with fresh air and exercise.”

2. Sharp Park is a Rare Public Seaside Links.

Sharp Park meets a second “historical resource” criterion listed in CCR 15064.5(a)(3)(C): it “embodies the distinctive characteristics of a type of construction”. Sharp Park is a true seaside links, a rare and historically significant type of golf course.

Among the scores of beloved golf courses built by Dr. MacKenzie around the world, Sharp Park is one of his very few public courses. With the Eden Course at St. Andrews, Scotland (which he co-designed with his London partner, H.S. Colt), Sharp Park shares the distinction as Dr. MacKenzie’s only public seaside links in the world.’

Although a rarity in America, the seaside links type of course has particular significance to the sport of golf, because the sport originated on seaside links courses in Scotland. In recognition of the historic significance of seaside links, the British Open Championship--one of golf’s four annual major championships--is played exclusively on links courses.

Dr. MacKenzie was an expert on seaside links, which he considered “the type of land easily the most suitable for the game.” Before immigrating to Northern California in the mid-1920’s, he was consulting architect at St. Andrews, Scotland, where he was the first to map the famous mounds, swales, pits, and bunkers of the Old Course, the birthplace of golf.

At Sharp Park, Dr. MacKenzie and his construction team intentionally created a Scottish-style seaside links on what had originally been an artichoke farm surrounding the brackish Laguna Salada (Spanish for “salty lake”) at Salada Beach, in what is today the Sharp Park District of Pacifica. Construction superintendant Chandler Egan marveled at the site’s “remarkable seascape,” prompting news reporters to hail Sharp Park as “a seaside municipal course of outstanding character akin to those of the English and Scottish coasts,” and “a second St. Andrews and the finest municipal golf course in America.”

3. Sharp Park’s Place in California And San Francisco History

Sharp Park also meets the “historical resource” criterion set forth in CCR Section 15064.5(1)(3)(A): it “is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.”

Sharp Park has long been known as “the poor man’s Pebble Beach,” and its opening in 1932 was part of a broad movement to extend the sport of golf to the American public. “I hope to live to see the day when there are the crowds of municipal courses, as in Scotland, cropping up all over the world,” Dr. MacKenzie said. Sharp Park’s tradition of low greens fees has made it a favorite over the years of low-income golfers, racial minorities, juniors, and seniors. In 1955, Sharp Park hosted the initial championship tournament of the Western States Golf Association, one of America’s oldest African-American golf associations.

Sharp Park also reflects San Francisco’s tradition of great public architecture. From City Hall and the Beaux Arts palaces at Civic Center to the Golden Gate Bridge, Bay Bridge, and

Golden Gate Park, San Francisco proclaimed itself a world cultural and artistic center through its public architecture. The hiring of the world's preeminent golf architect to build a public seaside links golf course in the spirit of St. Andrews is in keeping with this aspect of San Francisco's personality.

4. Sharp Park Has Retained Its Integrity.

Seventy-nine years after its opening in 1932, 12 of Sharp Park's current 18 holes are MacKenzie originals -being holes numbers 1, 2, 3, 8, 9, 10, 11, 13, 14, 15, 17, and 18; two other holes (numbers 12 and 16) lie in original fairways, but do not have the original greens. Four new holes were built east of the highway in 1941, after Dr. MacKenzie's death, by his assistant John Fleming, when the original strand holes were replaced by a seawall.

In the years since its opening in 1932, trees have grown and come down, some sand traps have grassed-in and others have built-up, mowing patterns on some greens have changed, and the old course has suffered other insults of the aging process. Notwithstanding, Sharp Park retains Dr. MacKenzie's routing, character, and artistry. His trademark heaving, tumbling greens can still be seen on current holes 1, 2, 3, 9, 10, 11, 13, 14, 15, 17, and 18. The rolling fairways and mounds on current holes 1, 3, 10, 14, 16, and 17 mimic the famous fairway bumps and hollows at the Old Course at St. Andrews, where MacKenzie once served as consulting architect. At current Holes 1 and 14, there are classic examples of MacKenzie "deception bunkers," placed some distance in front of the greens in such a way as to camouflage the actual distance between bunker and the green.

Overarching all is the great beauty of the golf course as a work of art. MacKenzie's ability to create beautiful natural-appearing landscapes that simultaneously function as playing fields for the full range of golfing abilities was his true genius. This beauty is a constant at Sharp Park, where Dr. MacKenzie's design principles and hallmarks remain visible to this day.

As a result, Sharp Park is a living public museum of golf architecture. In the words of San Francisco favorite son and 1964 U.S. Open golf champion Ken Venturi, this golf course is "Dr. MacKenzie's great gift to the American public golfer."

Today, the course is at the same time beautiful, challenging, and playable for players of all abilities. Golf architecture historian Geoff Shackelford sums up Dr. MacKenzie's design at Sharp Park as follows: "no municipal course design has ever come close to matching the overall package of beauty and affordable links-style golf." Dr. MacKenzie's beautiful cultural landscape is enjoyed not only by golfers, but as well by passersby who view the course from the California Coastal Trail, which borders the course atop the seawall.

Dr. MacKenzie, an international master golf architect with unparalleled expertise in seaside links courses, designed Sharp Park in the style of the historic Scottish public links. In this way, he tied American golfers to the roots of the Scottish game. It is one of only three public seaside links courses in California, and one of the few places in the world where MacKenzie's work is available for use and enjoyment by the general public.

For all these reasons, the San Francisco Public Golf Alliance and its more than 5,000 members, support the determination of the San Francisco Planning Department that the

Sharp Park Golf Course is an “historical resource” under the California Environmental Quality Act. [SFPGA-1-01]

- In addition to what the San Francisco Public Golf Alliance has already laid out in making its case for Sharp Park Golf Course, I acknowledge that I have read and strongly agree with the determination that Sharp Park Golf Course be considered a "historical resource" under the California Environmental Quality Act. [SFPGA-2-02]
- I am writing to you in support of the preservation of Sharp Park Golf Course as we know it today. Sharp Park Golf Course, designed by Master Architect, Dr. Alister MacKenzie, is an historical property, an important part of San Francisco's history, and should be safeguarded from any significant modifications that will change its architectural integrity.

The San Francisco Public Golf Alliance, in a letter to you dated September 20, 2011, comprehensively outlined all of the reasons it supports the determination of the San Francisco Planning Department that the Sharp Park Golf Course is an "historical resource" under the California Environmental Quality Act. [SFPGA-2-03]

- We are writing to you today to voice The PGA of America's wholehearted support for the proposed designation of Sharp Park Golf Course as a historical resource of the City and County of San Francisco. We feel strongly that as one of renowned architect Alister MacKenzie's final designs prior to his death, it holds true historic value not only for your region but for the U.S. golf industry as well. [SFPGA-2-04]
- On behalf of the Golf Course Superintendents Association of America (GCSAA) I am writing in support of the "historical resource" designation for the Sharp Park Golf Course.

Sharp Park Golf Course is a historical and cultural resource, and is recognized as such by local, state and national entities. Not only was Sharp Park designed by Alister MacKenzie, one of the greatest golf course architects of all time, but it is also unique because it is one of the few municipal courses he designed. [SFPGA-2-06]

- However, I fully support that Sharp Park is an historic course that is lovely for even those of us that don't golf. [Bowman-1-05]
- I support the designation of Sharp Park as a historical resource. [Gleichenhaus-1-01]
- I am writing to endorse the decision to designate Sharp Park Golf Course as an “historical resource.” Sharp Park is a fine representation of the mastery of course architect Dr. Alister MacKenzie. The course today boast many of the aspects of course design espoused by Dr. MacKenzie, perhaps the greatest course architect in history, when it was created nearly 80 years ago. Over the years, like all things, the course has lost some of its luster, but the underlying beauty remains. I am gratified that the City and County of San Francisco support Sharp Park Golf Course as a public resource worthy of preservation. For all these reasons, as well as those expressed in the Francisco Public Golf Alliances's letter dated September 20, 2011, I am proud to support the designation of Sharp Park Golf Course as an historic resource under the California Environmental Quality Act. [Horn-1-01]

- I am writing this letter to fully support the decision to designate Sharp Park Golf Course as a “historical resource.” [Lee-Y-1-01]
- I am not a golfer, so my support for the Historical Resource Designation pending comes from a slightly different point of view. I wholeheartedly support the designation because of the unique, historic and wonderful asset San Francisco has - an authentic Alister MacKenzie 18-hole golf course. This is truly a treasure that should be preserved. As a long-term San Franciscan resident, moreover, I believe having this public golf course available at reasonable rates to people of all walks of life is what San Francisco is all about.

I vote, and I support this Historic Resource Designation. [Levins-1-01]

- I am writing to fully support the decision to designate Sharp Park Golf Course as an “historical resource.”

Sharp Park is the functional equivalent of fine art - it represents the work of an unquestioned master (Dr. Alister MacKenzie, renown the world over as perhaps the greatest golf course architect in history) and the course today still contains the vast majority of timeless features Dr. MacKenzie created almost 80 years ago. While the course needs restoration work, that fact alone does not diminish its importance. Our Cable Cars needed work in order to save them, too. And so do many of our fine buildings, which are architectural landmarks themselves.

The fact is, Sharp Park is a part of our collective history. It is living breathing organism that requires our tender, loving care. And golfers around the world know of the course and appreciate its beauty and what it represents as an outstanding example of golf course architecture in the game’s “golden age.” In a sense, Sharp Park stands as does the Palace of Fine Arts as a reminder of a time long ago, and something worth preserving for generations to come. The extra bonus in this case is that the golf course itself has always been -- and remains today -- a vital recreational resource for modest income people who love the game of golf. It is used by diverse group of people who, quite literally, have no place else to play the game at affordable rates. The course has been recognized far an wide as an historic property and has demonstrated that golfers and endangered species can get along with each other in a healthy environment.

I am gratified that the City and County of San Francisco has joined the chorus to support Sharp Park Golf Course as a public resource worthy of preservation. This decision is clearly correct on the historic record, and is another reminder that San Francisco is the City that knows howl.

For all these reasons, as well as those expressed in the San Francisco Public Golf Alliance’s letter dated September 20, 2011, I am proud to support the designation of Sharp Park Golf Course as an historic resource under the California Environmental Quality Act [Links-1-01]

- I write this letter in support of the San Francisco Planning Department’s designation of Sharp Park Golf Course as an “historical resource” under the California Environmental Quality Act.² I also write this letter to point out several serious factual errors in the October 27, 2011,

letter of Wild Equity Institute's "historic landscape architect" Chris Pattillo, which errors discredit Mr. Pattillo's analysis.

I also wish to comment on the issue of Sharp Park's qualification for historical status under Criteria All, association with significant historical times and events. Sharp Park was designed and built during the so-called "Golden Age of Golf" in the United States and California, during which history's greatest golf architects, including Alister MacKenzie, were building courses and expanding the reach of the sport in the United States and around the world.¹⁸ During this period, golf was expanded, by construction of Sharp Park and other public courses, to the urban masses. Sharp Park has always fulfilled its role as the "poor man's Pebble Beach": great architecture for the common people. In this connection, in 1955 Sharp Park was the site of the inaugural tournament of the Western States Golf Association¹⁹ one of the country's oldest and largest African-American golfing societies. Sharp Park thus played a significant role in the racial integration of American public recreation. [Links-2-01]

- This letter is written to support the decision to designate the Sharp Park golf course as a "Historical Resource". [Mansbach-1-01]
- I have read and strongly agree with the determination that Sharp Park Golf Course be considered a "historical resource" under the California Environmental Quality Act. [Tully-1-01]
- It is significant that Sharp Park was built by history's greatest golf architect, Alister MacKenzie. Most of MacKenzie's courses include the most famous ones, like Augusta National, the site of the annual Master's Tournament, and Cypress Point. These are private and inaccessible to common people. Sharp Park is part of San Francisco's legatorian tradition of providing great classical architecture for its public places. This is the spirit of San Francisco. [PH-Bryant-01]
- I wanted to add some historical words and specifically to say the staff got it a hundred percent correct in the draft EIR designating this precious golf course as an historic resource. This is the legacy of John McLaren. It was his vision, and he brought in one of the greatest architects in the history of the world, Alister MacKenzie, to create this very special asset for the City and County of San Francisco even though it's on property in Pacifica. This is clearly the work of a master. It's the equivalent of a Rembrandt that would hang in a museum, and the fact that it's old and maybe a little faded doesn't take away its luster. People come from all over the world to walk it, to play it, to see it, to admire it, to know it, to understand it. It's a symbol of golf's golden age. It's part of our historic legacy just the way Sharp – the way Coit Tower is, the way the cable cars are. [PH-Links-01]
- It is a historical construction by a -- one of the great architects of golf courses ever. [PH-Mozingo-02]

Response CP-1

These comments express support for the conclusions documented in the EIR, and some comments provide additional background materials in support of the determination in the EIR. These comments do not present any new evidence that would change the conclusions in the EIR.

Comment CP-2 Opposition or uncertainty about determination that Sharp Park Golf Course is a historic resource

The response to Comment CP-2 addresses all or part of the following individual comments:

- | | | |
|----------------|------------------|---------------|
| HPC-1-01 | Sierra Club-1-09 | WEI-1-03 |
| Anonymous-1-01 | Keitelman-1-01 | Pattillo-1-01 |

- The HPC did not have consensus on the historical integrity of the Sharp Park Golf Course. Some commissioners thought that the property does not retain sufficient integrity to convey the property’s historical significance per the National Register of Historic Places and/or California Register of Historical Resources, while others thought that the property does retain sufficient integrity. [HPC-1-01]
- **3. Inappropriate designation of golf course as a Significant Historical Resource.**

We recognize that while the Sharp Park golf course is not represented in either the Federal Register or the State Historic Resources Inventory, CEQA gives discretionary authority to the Lead Agency to treat locally significant historical structures or landscapes as an historical resource for CEQA purposes. However, the key term here is “discretion.” In general, only those resources which are eligible for listing under the State Historic Register are permitted to be treated as such for CEQA purposes (California Public Resources Code; Sections 5020–5029.5). Here is the relevant section of the Code pertaining to eligibility requirements for listing on the State Inventory:

Chapter 11.5. California Register of Historical Resources

Section 4852. Types of Historical Resources and Criteria for Listing

The criteria for listing historical resources in the California Register are consistent with those developed by the National Park Service for listing historical resources in the National Register, but have been modified for state use in order to include a range of historical resources which better reflect the history of California. Only resources which meet the criteria as set out below may be listed in or formally determined eligible for listing in the California Register.

Among the criteria which are used to determine whether a resource can be deemed historically significant is “integrity,” defined in subsection (c):

- (c) Integrity. Integrity is the authenticity of an historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance. Historical resources eligible for listing in the California Register must meet one of the criteria of significance described in Section 4852(b) of this chapter and retain

enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Historical resources that have been rehabilitated or restored may be evaluated for listing. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association.

Extrapolating from these criteria and general CEQA practice regarding historical resources, it is hard to see how the golf course can be considered an historical resource because it lacks integrity, having been altered many times in the past through both natural and human interventions. Indeed, the proposed project will alter the course even more by relocating and shortening additional holes. What the report is saying, in effect, is that the general concept of an 18 link golf course is a significant historical resource, a designation which in our view is improper. [Sierra Club-1-09]

■ **The Historic Resource Assessment for Sharp Park Golf Course is erroneous.**

As explained in the attachment, the Sharp Park historic resource assessment is fundamentally flawed. The golf course clearly no longer retains integrity – review of the comments submitted by PGA Design (also attached here), by the comments of the Historic Preservation Commission, and by independent analysis, the golf course lacks historic integrity today. See the attached Wild Equity Institute assessment for a link-by-link assessment of the course’s integrity.

The assessment relies almost entirely for its argument on the position of uncredentialed individuals associated with the San Francisco Public Golf Alliance to support its view. But this view has never been adopted by any public body – including the City of Pacifica, despite the DEIR’s assertion to the contrary. In particular, the City of Pacifica has never moved Sharp Park Golf Course onto a list of protected historic sites – only the golf course Club House has been so protected. Indeed, the golf course receives the same protection under Pacifica’s general plan historic element as Laguna Salada itself and the surrounding habitat areas. Yet these areas are excluded entirely from the historic resource assessment.

Moreover, the City’s assertion that the era in which the golf course was created was somehow significant is unsubstantiated and not adequately documented. There is simply no evidence that there was a “golden era of golf” in San Francisco when the golf course was constructed – indeed, the evidence indicates that golf course demand was on the wane when Sharp Park was constructed. Without additional documentation that the era was significant, there is simply no basis under any criterion to declare Sharp Park Golf Course an historic resource under CEQA, as explained in the attached comments by PGA Design. Absent more information about this era and its relationship to the time period around this period of significance, the City has no basis for declaring Sharp Park Golf Course historic. [WEI-1-03]

- Sharp Park today bears no resemblance to Alister MacKenzie's original design. The water features on five MacKenzie holes east of Laguna Salada, original holes 1, 9, 15, 16, & 17, have been culverted, eliminating crucial water hazards essential to his design. Five holes west of Laguna Salada, including original holes 3, 4, 6, 7, & 8 were destroyed completely by massive coastal storm surges and the subsequent construction of the berm, and two others, original

holes 2 & 5, were severely damaged and modified to eliminate additional water features and other elements of their design. Now the site of hole 12, the original hole 2 was shortened by 60 yards and a stroke while the strategic features—including its proximity to a much larger Horse Stable Pond than exists currently—are almost completely irrelevant to the hole's play today. Hole number 5, which was considered by Jack Fleming to be “one of the most interesting holes on the course, similar to Dr. MacKenzie's ‘ideal golf hole,’” is now the current site of hole 17, but other than occupying the same space the hole bears absolutely no resemblance to the original hole 5: a tee shot over Laguna Salada has been removed, and dual fairways have been combined into one, eliminating strategy alternatives integral to MacKenzie's design. Original holes 10 and 11, now the location of holes 14 and 15, have likewise been modified with changed greens and fairways that bear no resemblance to MacKenzie's layout. Indeed, Daniel Wexler argued that the original hole 10 was perhaps the course's best link, but its essential feature—a double fairway—no longer exists. Original hole 12, now the location of hole 18, has had sand traps removed from the design. In addition, original hole 13 (now 3), and original holes 14 and 15 (now the location of holes 8 and 2) described by Wexler as “not among the layout's finest” to begin with, have likewise had hazards reconfigured, as has the final original hole, 18 (now the location of hole 10). In addition, the theory of the course—the creation of a links-type, seaside course—was entirely upended when the berm was built separating the course from the ocean. In short, every link has been changed at Sharp Park—in many cases radically, and many holes have been lost completely. It is misleading to claim that any historical integrity exists at the course, let alone that 12 of these radically altered holes are “original” MacKenzie links. [Anonymous-1-01]

- But golf advocates are trying to do an end-run around this planning process, claiming Sharp Park should be landmarked because Alister MacKenzie designed it. But history is not on their side.

Mackenzie helped revolutionize golf architecture in the last century by insisting that courses “imitate the beauty of nature,” rather than be in conflict with it. But MacKenzie ignored his own maxim when he designed Sharp Park. The project required dredging and filling this delicate coastal landscape for a staggering fourteen months in order to create enough dry land for an 18-hole golf course. And in perhaps his greatest ecological mistake, MacKenzie leveled a coastal barrier that provided Sharp Park with natural protection from the surging Pacific Ocean, replacing it with seven links so that golfers could view the sea.

The flaws in this design became evident almost immediately. Opening day of the golf course was delayed twice due to excess water on the course. Then a massive coastal storm surge, no longer held at bay by the natural barrier MacKenzie destroyed, inundated the course and severely damaged several of MacKenzie's signature beach-side holes. The subsequent routing of Highway 1 through Sharp Park destroyed another MacKenzie link, permanently bifurcating MacKenzie's original design.

San Francisco eventually decided to alter what remained of MacKenzie's layout. The City constructed a levee along the coastal edge of Sharp Park, in places 30 feet high, destroying the ocean views MacKenzie designed. And in 1972 Robert Muir Graves redesigned Sharp Park, moving several links into an upland canyon.

But rather than solving the flooding problem, the levee and redesign exacerbated it. The new design blocked the natural water seeps and outflows through Sharp Park to the ocean, and the course now floods annually during normal winter rains.

Currently San Francisco attempts to prevent the freshwater flooding of the golf course by pumping water through the levee, but this is killing the threatened California red-legged frog – also known as Twain’s Frog, because it is the central character in Mark Twain’s short story “The Celebrated Jumping Frog of Calaveras County.” In addition, the operation of the golf course threatens the endangered San Francisco garter snake – considered the most beautiful serpent in North America – as mowing operations kill the snakes while they bask in the sun on the course’s fairways. The United States Fish and Wildlife Service warned San Francisco in 2005 to stop harming these species or face potential civil and criminal liabilities. The golf course managers responded by leaving standing water on the course for most of the year, causing further damage to the course.

Consequently, there is simply no MacKenzie legacy at Sharp Park today. A San Francisco golf program employee wrote a history of San Francisco golf in 1978 and explained that MacKenzie’s design “would never be the same” after the coastal storms decimated the course, and claimed the Robert Muir Graves redesign was like “taking a house with a beach view and turning it 180 degrees to face a mountain slope.” Daniel Wexler, writing in his book “missing links,” noted that MacKenzie’s Sharp Park was “shortly lived” and “washed into oblivion by a coastal storm.” He concluded that “no appreciable trace of [MacKenzie’s] strategy remains in play” at Sharp Park today. [Keitelman-1-01]

- The *Historical Resources Evaluation Report* (HRER) prepared by Tetra Tech, Inc. describes many alterations made to the course since 1932. Comparing the course layouts depicted in the two exhibits included in the Evaluation Report one finds very few similarities between how the course was designed and how it exists today.
 1. The original hole 1 (now hole 11) was a long, straight shot. The reconfigured hole doglegs to the right.
 2. The original hole 2 (now hole 12) was a dogleg that wrapped around the south end of the course. Hole 12 is now a lot shorter with no dogleg.
 3. The original holes 3, 4, and 8 were destroyed in a big storm and not replaced.
 4. The original hole 5 offered multiple fairway options – a unique design feature of Mackenzie. Hole 17 which replaced 5 is a single straight shot.
 5. The original hole 6 that ran east-west at the north boundary no longer exists.
 6. The original hole 7 appears to be similar to current hole 16 identified on Figure 2 as having been built after 1941, after the period of significance.
 7. The original holes 9 and 10 each offered double fairways. The replacement holes 13 and 14 eliminated these special features.
 8. The original hole 11 – a short run - appears to be similar to current hole 15.

9. The original hole 12 was a long straight shot. It has been replaced by hole 18 that is longer with a dogleg.
10. The original holes 13, 14 and 15 were on the east side of the county road and generally paralleled the road running north-south. Today this area has four holes that all run east-west.
11. The original hole 16 was a dogleg left replaced by hole 3 a straight shot.
12. The original hole 17 ran east-west and was a long shot with a dogleg. Hole 8, a short, straight fairway replaced it.
13. The original hole 18 was a dogleg. This hole has been replaced by hole 2, a straight shot.

Other major changes implemented since the period of significance include:

- A. Elimination or reconfiguration of several sand traps.
- B. Construction of a seawall in 1941 to prevent flooding of the golf course. This eliminated views to the beach and Pacific Ocean and the essence of the links design concept.
- C. Filling a portion of the lagoon as part of the reconfiguration of hole 10.
- D. Installation of concrete golf cart paths along the back nine holes in 1996 where none existed previously.
- E. Culverting of water features on five holes and the elimination of water hazards – an important component of the original design.
- F. Installation of a 4000-gallon pump to help with annual flooding of Laguna Salada.
- G. Alternations made between 1985 and 1994 to accommodate female players such as shortening of the fairways.

Adding together all of these alterations it is apparent that Sharp Park Golf Course lacks sufficient integrity to qualify as a historic resource under criterion C/3. The course no longer reflects the work of Alister Mackenzie. The land use remains a golf course but otherwise there are few similarities between the course that existed during the period of significance and what remains today.

The Evaluation Report notes that Alister Mackenzie attained status as a master golf course architect. Appendix C on page 4-7 notes, “George Shackelford, in his book *Grounds for Golf*, describes Mackenzie as a master designer and offers that Mackenzie’s secret to creating unique courses was his talent for routing.” Regrettably, today nothing remains of Mackenzie’s unique routing. He continues to explain that his work “was known for its original and distinctive bunkers, with irregular shapes and each with its own design.” And “Distinctive bunkering, the use of small hillocks around greens, and exciting hole locations were Mackenzie’s trademark”.

Another of Mackenzie’s trademarks was his talent for working with natural landform and subtlety integrating his courses with a site’s topography to take full advantage of the unique qualities of each site. Quoting from the HREER, “Mackenzie felt that the success of golf course construction depended entirely on making the best use of natural features and devising

artificial ones indistinguishable from nature.” The HRER continues with, “while many architects try to create a special course, Mackenzie could figure out how best to fit holes into a property and situate a golf course to evoke a comfortable, settled, connection to the ground. His course routings are always functional and original but rarely do they fight the contours of the property.”

In summary, defining characteristics of Mackenzie’s design style included unique course routing, a talent for adapting a course to fit the land, an ability to offer challenge to players of varying skill levels, distinctively designed bunkers, and inclusion of multiple fairway options – offering advantage to those to took greater risks in their play. The vast majority of these features have been eliminated from the course. According to Wexler, in a recently published article “no appreciable trace of his strategy remains in play.”

Unfortunately, Sharp Park Golf Course began to fail even before the course opened in 1932 because Mackenzie failed to fully understand the forces of nature at this site. Page 4-3 of the Evaluation Report notes that the opening was delayed twice due to “drainage problems on the course due to winter rains.” Shortly after the course opened a major storm washed out a large portion of the course and necessitated construction of the seawall in 1938 intended to prevent similar damage in the future. This type of damage has continued – as recently as 1982 a major storm wiped out several holes. In 1990 another breach killed many of the cypress trees on the course. Few of the golf courses designed by Alister Mackenzie remain intact today. It would be ironic and misplaced if this course – one that represents a failure in design – became a lasting representative of his life’s work by being officially designated as a historic property.

The determination of historic significance is tied to a site’s level of integrity. According to *A Guide to Cultural Landscape Reports: Contents, Process, and Techniques*⁴ “The historic integrity of a cultural landscape relates to the ability of the landscape to convey its significance.” And “Historic integrity is assessed to determine if the landscape characteristics and associated features, and the spatial qualities that shaped the landscape during the historic period of significance, are present in much the same way as they were historically.” Emphasis added.

The guide continues, “Historic integrity is determined by the extent to which the general character of the historic period is evident, and the degree to which incompatible elements obscuring the character can be reversed”. In the case of Sharp Park Golf Course the changes to the course were not the result of the normal evolution of a living landscape – maturing trees and other plantings, but rather major changes that were forced to solve functional problems that resulted from flaws in the original design – a failure to fully understand the power of nature and it’s ability to wreak havoc. The changes made to Sharp Park Golf Course cannot be reversed because doing so would recreate the conditions that necessitated that the alterations be made in the first place.

Page 5-2 of the HRER notes, “Because landscape features change over time, a landscape need not retain all of the original features it had during its period of significance, but it must retain the essential features and characteristics that make its historic character clearly recognizable.”

In essence for a site to meet the criteria of historic significance most of the designed features must look as they did during the period of significance. This may be true for the Clubhouse and maintenance building which are not addressed here, but it is not the case at Sharp Park Golf Course and no doubt explains why “None of the state or national registers identified Sharp Park Golf Course as a historical resource” as noted on page 4- 1 of the HREER.

By making the finding that the existing golf course represents a historic resource under criterion C/3 it seems that Tetra Tech failed to appreciate not only the subtleties of golf course architecture but its essential features. Just because there was a golf course present in 1932 the fact that there is still a golf course present today, does not qualify the current course as a historic resource.

Sharp Park Golf Course lacks integrity. While a golf course at this site is consistent with the historic land use, that fact is insufficient evidence for a finding of historic significance. Failure to demonstrate significance voids eligibility for historic resource status. I urge you to consider this as you plan for the future use of Sharp Park. [Pattillo-1-01]

Response CP-2

The WEI-1 comment letter included, as an attachment, a copy of the Pattillo-1 comment letter. The individual comments of Pattillo-1 have been considered and addressed in this response. These comments express disagreement with the EIR’s conclusion that the Sharp Park Golf Course retains adequate integrity to be determined a historic resource for purposes of environmental impact evaluation under CEQA. Several comments remarked on the adequacy of the analysis of the Sharp Park Golf Course and the determination that it is eligible for listing in the NRHP and CRHR as stated in the HRE and the EIR, specifically questioning whether the golf course retains historic integrity.

The Planning Department acknowledges that two of the seven members of the San Francisco HPC disagreed with the historic eligibility determination for the Sharp Park Golf Course. The assessment of potential impacts to historic resources at Sharp Park, as presented in the EIR are based on the analysis and conclusions of the Historic Resource Evaluation Response (HREER) and the Historical Resources Evaluation (HRE) conducted for the proposed project. HRE Section 5.2 (included in EIR Appendix C) provides a full analysis of the historic nature of the Sharp Park Golf Course, including the integrity of the resource, and the impacts of the proposed project on the golf course as a historic resource. The golf course and its associated structures (such as the clubhouse) were evaluated using the criteria for identifying historical resources under CEQA Guidelines Section 15064.5(a)(2)–(3), which provide the criteria from California PRC Section 20524.1. The evaluation was also conducted using the NPS *National Register Bulletin 18*, “How to Evaluate and Nominate Designed Historic Landscapes,” which defines a historic designed landscape as one that:

“has significance as a design or work of art; was consciously designed and laid out by a master gardener, landscape architect, architect, or horticulturalist to a design principle, or an owner or other amateur using a recognized style or tradition in response or

reaction to a recognized style or tradition; has a historical association with a significant person, trend, or event, etc. in landscape gardening or landscape architecture; or a significant relationship to the theory or practice of landscape architecture.”

As part of the analysis conducted for the HRE, a records search was conducted of the Northwest Information Center, the National Register of Historic Places, and the California Register of Historical Resources. The HRE states that the Sharp Park Golf Course was not listed on any federal or state registers; this does not indicate that the course is not eligible for listing, rather it indicates that the course had not yet been evaluated for historical significance and eligibility for listing on federal or state registers prior to the preparation of the HRE and the EIR. CEQA Section 21084.1 states:

“[t]he fact that a resource is not listed in, or determined to be eligible for listing in, the California Register of Historical Resources, not included in a local register of historical resources, or not deemed significant pursuant to criteria set forth in Section 5024.1(g) shall not preclude a lead agency from determining whether the resource may be a historic resource for purposes of this section.”

In conjunction with this EIR, the Sharp Park Golf Course was evaluated and determined eligible for the California Register of Historical Resources (CRHR) (and the National Register of Historic Places (NRHP)) as a designed historic landscape for the reasons detailed in the HRE and described on Draft EIR pp. 207 to 209.

The HRER and EIR acknowledge that alterations to the Sharp Park Golf Course have occurred over time, as is expected with landscape cultural resources. Also, HRE Section 4.3 explains:

“Golf courses have been called living things in the sense that they are mostly constructed of living elements, such as grass and trees, which grow and change over time. Soil erodes, changing the pitch of slopes; trees grow or are replanted, and the holes cannot be played as they were originally. Advancements in playing equipment also change the game. Courses are redesigned, replaced, or remodeled for two reasons; the first is to improve the layout of the course, the second is to adjust the course for advances in golf technology. Redesigning golf courses involves rerouting and adjusting holes. In golf course architecture, restoring courses is considered to be the act of bringing a course back to, or closer to, its original state. At the same time, there are technological advances in the game of golf (balls, clubs, and mowing techniques) that advance and, therefore, result in alteration of the course to maintain playability. By the late 1920s, golf course designers accepted the idea that both natural and technological advances are factors, among others, that make it necessary to continuously improve golf courses, in order to maintain the strategy of the game.”

HRER Section 4.3.1 (included in EIR Appendix C) states:

“there has been a strong desire to maintain the original design layout of the course to the greatest extent. Many of the alterations have been forced by the natural changes in the landscape, with only a few changes made to accommodate advanced technology in golf

clubs and ball construction. The goal has been to make the necessary modifications while preserving Sharp Park's function as a golf course, laden with elements of challenge and surprise, and to maintain playability."

In describing the history of the Sharp Park Golf Course, the HRE also acknowledges changes that have been made to the golf course, including the construction of the seawall or berm in 1941.

With respect to whether the Sharp Park Golf Course retains historic integrity, the HRE finds:

"[a]lthough the course has been modified over time, the golf course is in its historic location and retains much of its historic appearance, except that the ocean is no longer visible from the course. Still present are the lagoon, the east and west locations of the holes, and the fairway, which were all elements of the original design. Mackenzie designed the course with interesting challenges for golfers, regardless of their skill level, which is still true of the current course. Man-made features that have been added, such as the seawall, do not diminish the historic integrity of the course because the land and its location were important to Mackenzie's design; thus, the course is still authentic to Mackenzie's plan. The course retains its integrity of design, workmanship, and materials, which provide it with a similar sense of feeling and association to its period of significance."⁵⁸

Some commenters suggest that the golf course was not constructed during the period of significance and that it was constructed when golf course demand was waning. The HRE describes the period of significance as between 1910 to 1930 because this period was often called the "golden age of golf." The Sharp Park Golf Course was constructed from 1929 to 1932.

Comments have been received both in support and opposition to the historic resource designation of the Sharp Park Golf Course. As stated in CEQA Guidelines Section 15151, assuming that the comments express the view of a qualified expert, "[d]isagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among experts. The courts have looked not for perfection but for adequacy, completeness and a good faith effort at full disclosure." Accordingly, the following paragraph has been added after the last paragraph on Draft EIR p. 208, as follows):

The Planning Department acknowledges that two of the seven members of the Historic Preservation Commission disagree with the EIR's conclusion that the Sharp Park Golf Course retains sufficient integrity to be designated a historic resource. While many comments were received on the EIR in support of the conclusion that the Golf Course is a historic resource, other comments suggest that the golf course does not retain sufficient integrity and question the identified period of significance (1910-1930). A disagreement among experts does not make an EIR inadequate, but these points of disagreement are discussed here in compliance with CEQA Guidelines Section 15151. In instances where a potential resource has strong evidence of historical

⁵⁸ Tetra Tech, *Historic Resource Evaluation Report for the Sharp Park Golf Course, Part of the Natural Areas*, January 2011.

significance, the San Francisco Planning Department takes a conservative approach to its determinations, thereby ensuring that preservation is appropriately administered. These points of disagreement do not change the conclusions in this EIR.

The main points of disagreement relate to whether the property retains sufficient integrity to convey the property's historical significance, with the commenters contending that the City's determination of significance is unsubstantiated, not adequately documented, and prepared by individuals that do not possess the proper qualifications. The HRER and Draft EIR analysis relative to the Golf Course's designation as a historic resource provides the required substantiation and documentation, and it was prepared by the City's Historic Preservation Specialists.

The revisions to the text, as described above, do not change any of the conclusions of the EIR.

One commenter also expressed concern that the operation of the golf course threatens the endangered San Francisco garter snake. Operation of the golf course would not change over the long term as a result of the SNRAMP; however, the SNRAMP does propose changes to the management actions at Sharp Park. Consistent with the requirements of CEQA, the Draft EIR evaluates the potential effects of the proposed change in SNRAMP management actions at Sharp Park. Continued operation of the golf course is a separate activity and, accordingly, is not evaluated in this EIR.

As discussed on Draft EIR pp. 322 to 324, the proposed management actions at Sharp Park would result in long-term benefits to sensitive species, including the California red-legged frog and San Francisco garter snake. As an example, as stated on Draft EIR p. 146, the SFRPD would continue to use pumps to manage water levels in Horse Stable Pond to conserve the California red-legged frog by conducting post-rainfall inspections of the pond for California red legged frog egg masses and making any pumping changes necessary to prevent stranding and other impacts to egg masses, if egg masses are present. Similarly, Draft EIR p. 374 states that the operation of pumps to control water levels in Horse Stable Pond and Laguna Salada would be designed to maintain water levels for the protected species (meaning, San Francisco garter snakes and California red-legged frogs), which would also reduce the frequency of flooding of the golf course. Water levels in Laguna Salada and Horse Stable Pond would not be drawn down more than necessary to prevent flooding, which would be beneficial for the golf course, as well.

Comment CP-3	Agree with significant impacts and mitigation measures regarding the Sharp Park Golf Course Historical Resource
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The response to Comment CP-3 addresses all or part of the following individual comments:

SFPGA-1-02

SFPGA-1-03

SFPGA-1-04

SFPGA-3-04

SFPGA-3-05

SFPGA-3-06

Holzman-1-05

- 1. We agree with the conclusion of the Planning Department that closure of Hole 12 would cause a significant impact to the historical resource. [SFPGA-1-02]

- 2. We agree with the Planning Department's conclusion that, if Hole 12 is going to be lost, the preferred mitigation alternative would be restoration of one of MacKenzie's long-abandoned original holes west of Highway One and near the ocean. [SFPGA-1-03]
- 3. We agree with the Planning Department's conclusion that shortening or narrowing Holes 10 and 13 would constitute significant impacts to the historical resource. We believe that "10" is a typographical error, and that the Department intends to say Hole 9; we are looking into this. [SFPGA-1-04]
- Closure of Hole 12 would constitute "significant impact" upon the historical resource of the Sharp Park Golf Course. [SFPGA-3-04]
- (a) Our first preference is that Hole 12 be kept in play; move the green 20-30 yards to the northwest of the current green, at the foot of the sea wall, and replace the first 75 yards west of the connective channel (nearly to the current green location) with native plantings, and convert the newly native-planted area to upland habitat for the frog and snake; the new natural area would be completely off-limits to golfers; the current cart path would be replaced by a wooden bridge similar to the newly constructed wooden walkways at Mori Point. The bridge would access the green area and the current 13th tee, which in turn would be connected to the 13th fairway by another long wooden bridge over the expanded connective channel. [SFPGA-3-05]
- (b) If the determination is made to close Hole 12, this would constitute a significant negative impact on the historical golf course. To best mitigate this effect, we believe the hole should be replaced by resurrecting and restoring an original MacKenzie-designed hole on the west side of Laguna Salada. There are two candidates for this: (i) Original Hole No. 4, a south-to-north 3-par hole of about 150 yards, whose green was located where the back tee on current Hole 17 is today located; and (ii) original Hole No. 6, an east-to-west 3-par hole of about 170 yards located at the northern end of the golf course, whose tee was located to the north of the current 17th green, and whose green was located to the southwest of the current 16th tee. Original holes ## 4 and 6 were abandoned in or about 1941, when the Coast Highway was built through the golf course and four new "canyon holes" were built in a canyon to the east of the then-new highway. Both Original Holes ## 4 and 6 appear on the as-built routing map of Sharp Park Golf Course, published in the San Francisco Chronicle in or about April, 1932. (A copy is attached as Exhibit "A"; Original Holes ## 4 and 6 are marked in yellow.) Because restoration of Hole 6 would be problematic due to crowding problems with the current 17th green and 16th tee (which crowding can be plainly seen by comparing the as-built routing map, Exhibit "A", with an aerial photo of the current golf course (see Exhibit "B" hereto), it is our belief that restoration of original Hole No. 4 would be the preferred mitigation for the loss of Hole 12. [SFPGA-3-06]
- There are two potential impacts addressed in the DEIR that I think may deserve some consideration. Those two areas of impact were Sharp Park Golf Course historical resources and lessening recreation opportunities. The impacts anticipated to Sharp Park Golf Course in reference to historical resources seem well worth the preservation and restoration of the endangered species present at the location. Clearly in this case, the global benefits of

biodiversity outweigh any “historical” impacts particularly since those impacts to historical resources temporally minute compared to the evolutionary history of these endangered species such management would benefit. [Holzman-1-05]

Response CP-3

These comments express support for the analysis documented in the Draft EIR and suggest ways to restore the Sharp Park Golf Course to 18-playable holes. Another commenter states that the biodiversity benefits of restoration efforts should outweigh impacts to historic resources and, also, this commenter expressed concern about lessened recreational opportunities at the Sharp Park Golf Course.

The Sharp Park Restoration Project, as described in the EIR, requires expansion of the Sharp Park Natural Area into the Sharp Park Golf Course and would result in the loss of Hole 12, as documented in Impact RE-6 on Draft EIR pp. 260 to 261. To address the significant recreational impact, Draft EIR Mitigation Measure M-RE-6, Restoration of the Sharp Park Golf Course to 18 Playable Holes, p. 264, requires that SFRPD retain the playability of the Sharp Park Golf Course as an 18-hole course and identifies two options for doing so, one of which closely matches a suggestion described in the comments above. Option 1 would replace Hole 12 on the west side of Highway 1 and Option 2 would replace this hole on the east side of Highway 1. Draft EIR pp. 264 to 269 describe the general environmental impacts that could result from implementing this mitigation measure. However, as described on Draft EIR p. 264, the determination of where the replacement hole is constructed and whether additional holes require moving may require additional environmental review. The options for re-design of the 18-hole golf course, as described by the commenters, have been forwarded to the SFRPD staff and Commission for their consideration. Some comments prefer that Hole 12 remain, suggesting an alternative to the EIR and would be similar to the No Project, Maintenance, and Maximum Recreation Alternatives identified in the EIR. An alternative that keeps Hole 12 in its place would not meet one of the primary objectives of the proposed project, which is to restore the Laguna Salada wetland complex for the benefit of special-status species; the proposal as described in the EIR was developed in close coordination with the USFWS, CDFW, and consulting biological experts and determined to be appropriate for the recovery of the San Francisco garter snake population. In accordance with CEQA Guidelines Section 15126.6, an EIR need not evaluate every conceivable alternative to a proposed project, rather the EIR alternatives analysis must describe a reasonable range of alternatives that would feasibly obtain most of the basic project objectives and would avoid or substantially lessen the significant environmental impacts of the project.

Refer also to Response PD-11, RTC p. 4-159, for a discussion of the SNRAMP’s goal to increase biodiversity within the Natural Areas.

Comment CP-4 Disagree with significant impacts and mitigation measures regarding the Sharp Park Golf Course Historical Resource

The response to Comment CP-4 addresses all or part of the following individual comments:

HPC-1-04	SFPGA-1-05	SFPGA-1-06
SFPGA-3-07	SFPGA-3-08	SFPGA-3-09
SFPGA-3-10		

- The HPC suggests that implementation of the Sharp Park restoration activity to construct a post and rail fence along the seawall of the golf course described in I-CP- 8 (Page 14) would cause a substantial adverse change in the significance of the Sharp Park Golf Course. [HPC-1-04]
- 4. We disagree with the Department’s conclusion that raising Holes 10, 14, 15, and 18 “would not cause a significant impact” on the historic resource. Rather, we believe that raising these fairways, or portions of them, has the potential to cause significant impacts; if done properly, we suspect that a good restoration golf architect could design raised fairways, or portions thereof, that would not necessarily constitute significant impacts. We cannot determine this in the abstract, but only upon a review of specific architectural and site plans for such work. [SFPGA-1-05]
- 5. We disagree with the Department’s conclusion that new fencing along the berm and the border of the protected wildlife area would not constitute significant impact upon the historic resource. Similarly to No. 4 [SFPGA-1-05], above, we believe that fencing has potential to cause significant impacts; but if designed and located properly, it is possible that fencing might have less-than-significant impact. It depends upon the specific architectural plans and the exact location for this fencing; the plans and construction of the fencing should be done in conjunction with the golf restoration architect. [SFPGA-1-06]
- **4. Hole 13 Should be Retained as a 5-par hole, with its tee to the west of the connecting channel.**
 - (a) Regardless the decision as to whether or not to retain Hole 12, it is our position that the existing Hole 13 tee should be retained on the western side of the connecting channel, so that the hole will continue to play as a 5-par hole. This can be accomplished by means of a wooden footbridge from the vicinity of the current 11th green/12th tee across the connecting channel to the location of the existing 13th tee. Hole 13 is one of the original MacKenzie-designed holes; it appears on MacKenzie’s 1930 routing map as the 9th hole of the original course, a 580-yard 5-par hole; on the 1932 as-built map, the hole is described as a 538-yard 5-par hole. To shorten this hole to a 4-par hole would constitute significant alteration of the original historic design of both this particular hole, and the golf course as a whole.
 - (b) An additional reason to maintain the 13th tee in its existing location is that this tee constitutes a continuing presence of golfers and golf maintenance personnel at the southwestern corner of the golf course. The golfers and golf maintenance personnel serve a policing function to defend the wetlands and sensitive habitats from trespassers, vagrants, and dogs. [SFPGA-3-07]

- **(5) Raising Holes 9, 14, 15, and 16 poses the threat of significant adverse change to the historical resource of the Sharp Park Golf Course.**

(a) We disagree with the DEIR's characterization of Impact CP-6 (at page 13 of the DEIR Summary), which says that "raising holes 10, 14, 15, and 18 would not result in a substantial adverse change" to the historic Sharp Park Golf Course.

(b) As a preliminary matter, we believe that the DEIR's reference to "Hole 10" is a mistaken reference. We believe that the Department intends to refer to existing Hole #9, which is the 5-par hole that extends for approximately 480 yards along the golf course's southern fence line; this hole's tee is just south of the green of Hole #1; its green is just to the south of the Hole #12 tee. The Department's confusion, we believe, arises from Figure 14 (following page 39) of the Recreation and Park Department's Sharp Park Conceptual Restoration Plan http://www.sf-recpark.org/ftp/uploadedfiles/wcm_recpark/SharpParkGC/Tetratchfinalrpt110609.pdf), which identifies this 5-par hole as number 10 on the city's plan to restore the golf course. However, it is Hole 10 on the Figure 14 map (copy attached as Exhibit "B") because the city's golf consultant inserted between current holes ## 6 and 7 on his conceptual map of the remodeled course a new-to-be-constructed hole to the east of the Coast Highway; the insertion of the new, not-yet-constructed hole would result in renumbering of all holes thereafter. Because that proposed new hole between current ##6 and 7 is not yet part of the golf course, and in fact may never be built, we believe it makes sense to refer to the golf holes by their current number, as they are being played as of October, 2011. Therefore, we prefer to refer to the southern boundary 5-par hole by its current hole number, which is Hole 9.

(c) Because it is an historic golf course, designed by a great master architect, Alister MacKenzie, any remodeling of Sharp Park must be handled extremely carefully. This property is a master's work. Restoration work must be done by contemporary master architects and craftsmen who can give appropriate respect to the master's work. If Holes 9, 13, 14, 15, and 18 are to be raised, then this work must be done very carefully, by a master can do this work in a manner that will properly respect MacKenzie's original work. If done in this careful way, using a contemporary master architect, San Francisco Public Golf Alliance believes that the holes can be raised in such a way that the impact on the historic quality of the golf course would be less-than-significant. However, without this high degree of care, it is equally possible that significant damage could be done to the historical resource. Hole 15, a one-shot 3-par hole is particularly vulnerable to being damaged by less-than-highest-quality architectural restoration in the event the ground level is raised, precisely because it is a one-shot hole. [SFPGA-3-08]

- **(6) Installation of permanent fencing along the seawall and along the wetland border on the golf course has potential to cause significant adverse change to the historic Sharp Park Golf Course.**

(a) We disagree with the DEIR comment Impact CP8 (DEIR, Chapter 1, at page 14) that construction of a fence alongside the seawall would not cause significant change to the historic golf course.

(b) This is a matter similar to the issue of raising the height of certain fairways, discussed in Paragraph (5), above. To begin with, it is clear from maps of the proposed restoration project that fencing is proposed not only for the seawall, but also along the boundary between the golf playing area and the wildlife habitat area. The locations of both fences has the potential to interfere with the design of the reconfigured golf course at Current Holes Nos. 9, 11, 13, 14, 15, 16, and 17, and at the site of original Hole #4 (which is a potential site for reconstruction of an original MacKenzie-designed hole to replace Current hole #12, as discussed above in Paragraph 4 of this letter).

(c) Accordingly, the location and design of the fencing must be done in conjunction with, and as a function of, the golf architect's work in designing the restored golf course. As discussed above in Paragraph 4, we strongly recommend that this work be done by a preeminent golf architect, credentialed to work on restoration of an historic golf course designed by master architect Alister MacKenzie.

(d) Yet an additional consideration in the location of the fence is the issue of the California Coastal Trail, which currently occupies the top of the sea wall which forms the western boundary of the Sharp Park Golf Course. We want to eliminate potential conflict between the recreational use of the California Coastal Trail and the historical resource of the Sharp Park Golf Course. The location of the fence alongside the sea wall will need to take these two uses into consideration. This needs to be under the supervision of the restoration golf architect. Issues of public trails along the tops of seawalls adjacent to golf courses is a commonly-occurring issue at the seaside links golf courses of Scotland, such as North Berwick, Lundin Links, and others. These public uses can be reconciled. [SFPGA-3-09]

- **(7) Modifications to Holes Nos. 9, 11, 13, 14, 15, 17, and 18, including but not limited to raising the ground level, and shortening, narrowing, or expanding the sizes of the golf playing areas, has potential to adversely affect the historic golf course. Accordingly, this restoration and remodeling work must be done only by the most highly qualified and experienced golf restoration architects.**

(a) For the reasons discussed above in Paragraphs 5 and 6, a top restoration architect, familiar with and experienced in historic golf architectural restoration work, must be involved in the renovation work. The work must be done under his/her direction and supervision.

(b) Specifically in the areas where the Sharp Park Restoration Plan will have habitat areas suitable for the frog and snake adjacent to golf playing areas (including but not limited to current Holes 9, 11, 13, 14, 15, and 17) there will be a need to have a neutral or sterile buffer area between the habitat and golf areas, so as to physically separate the golf playing areas from the habitat areas. Wide expanses of open sand would constitute such a neutral/sterile area. We recommend that strong consideration be given to a ribbon of sand stretching the entire length of the golf/habitat border. In fact, this fits the exact description of Current Hole 13 - original Hole No. 9 - as provided by MacKenzie's assistant Jack Fleming, published in the San Francisco Call-Bulletin shortly before the golf course opened on April 1, 1932. Hole 9

was described by Fleming as follows: “A lakeside hole with wide, sandy beach on water side.” (Copy attached as Exhibit “C”.) [SFPGA-3-10]

Response CP-4

Comments were received regarding the impacts to historic resources caused by raising, modifying, or moving holes at the Sharp Park Golf Course or installing the permanent post-and-rail fence. Also, one of the commenter's indicated a preference for using the existing hole numbering rather than the proposed hole numbering. Because the Draft EIR consistently used the proposed hole numbering, we are keeping that convention in this Responses to Comments document; however, the below list correlates the existing and proposed hole numbering to allow either system to be used.

<i>Existing Hole Number</i>	<i>Proposed Hole Number (used in the SNRAMP Draft EIR and the SNRAMP RTC document)</i>
1	1
2	2
3	3
4	4
5	5
6	6
	7 (new hole)
7	8
8	9
9	10
10	11
11	12
12	Replaced: Option 1 would replace Hole 12 on the west side of Highway 1, and Option 2 would replace Hole 12 on the east side of Highway 1.
13	13
14	14
15	15
16	16
17	17
18	18

Impacts Caused by Raising, Modifying, or Moving Holes at the Golf Course as a Result of Restoration Activities

With respect to raising Holes 10, 14, 15, and 18 (in terms of historic resources), Impact CP-6, provided on Draft EIR pp. 221 and 222 states that:

“As discussed in Section V.D.2, Sharp Park Golf Course meets the criteria for listing on the NRHP and CRHR for its significance under Criteria A and C and for listing on the CRHR under Criteria 1 and 3.

At Sharp Park, excavated dredged spoils appropriate for use as golf course substrate materials would be used on-site to raise Holes 10, 14, 15, and 18 and to create the upland habitat on the east edge of Laguna Salada. Although Holes 10, 14, 15, and 18 are included in Sharp Park Golf Course’s character-defining features because these holes are some of the original features and design of the clubhouse, raising Holes 10, 14, 15, and 18 would not have a significant impact on the historical character-defining features of the golf course because the holes would remain in place and alterations would be made only to elevate the holes, which would not impact the historic integrity of the fairways. The holes would retain their appearance and therefore there would be a *less than significant* impact on the golf course from raising holes at the Sharp Park Golf Course. “

With respect to modifying Holes 10 and 13 (in terms of historic resources), Impact CP-9, provided on Draft EIR p. 224 states that:

“Modifying approximately 13 acres of the golf course to create upland habitat along the east side of the lagoon to provide San Francisco garter snake upland habitat would require slightly shortening or narrowing Holes 10 and 13. The habitat corridor would be approximately six acres, bringing the total of modified area at the golf course to about 19 acres. These changes would substantially alter historic character-defining features, Holes 10 and 13. Implementing Mitigation Measure M-CP-7 would record the golf course in its existing condition and reduce the magnitude of this impact; however, M-CP-7 would not reduce it to less than significant. No additional feasible mitigation measures have been identified; therefore, shortening and narrowing Holes 10 and 13 would result in a *significant and unavoidable* impact on the Sharp Park Golf Course. “

With respect to closing Hole 12 (in terms of historic resources), Impact CP-7, provided on Draft EIR p. 222 states that:

“The closure of Hole 12 at Sharp Park would have significant impacts on the historic character-defining features of the golf course because it would eliminate an original hole and fairway on the west side of the course, along the ocean. Hole 12 was originally designed as a 262-yard fairway. The hole was shortened in the early 1960s and was renumbered. Although Hole 12 has been altered from its original design, its closure and conversion to a habitat corridor would be a significant impact on the golf course because Hole 12 was included as part of the golf course design since its inception. The hole had always been at the edge of the lagoon or backed against the seawall. Using the area for

habitat conservation and not as part of the golf course changes the boundaries of the golf course and its historic design. Therefore, closing Hole 12 would be a significant impact to the Sharp Park Golf Course. While replacing Hole 12 elsewhere on the course could be seen as a potential mitigation measure in that it would retain the course as an 18-hole facility, replacing it in a location other than its current location still diminishes its historical integrity as a character-defining feature of the golf course and would not sufficiently reduce the impact to less than significant. Implementing Mitigation Measure M-CP-7 would reduce the magnitude of this impact, but it would not sufficiently reduce it to a less than significant level. No additional feasible mitigation measures have been identified; therefore, closing Hole 12 would result in a *significant and unavoidable* impact on the Sharp Park Golf Course. “

Draft EIR Mitigation Measure M-RE-6, Restoration of the Sharp Park Golf Course to 18 Playable Holes, Draft EIR p. 264, was identified to restore the playability of the Sharp Park Golf Course as an 18-hole course, while preserving the historic character-defining features of the course and avoiding impacts to sensitive biological resources by identifying two options for replacing Hole 12. Option 1 would replace Hole 12 on the west side of Highway 1, and Option 2 would replace Hole 12 on the east side of Highway 1.

With respect to the relocation of Hole 12, the text on Draft EIR p. 262 has been changed as follows to affirmatively recognize the importance of preserving the historic character-defining features of the course and avoiding impacts to sensitive biological resources:

M-RE-6: Restoration of the Sharp Park Golf Course to 18 Playable Holes

The SFRPD shall coordinate with a golf course consultant with expertise in historic golf course renovation and with specific expertise, if possible, in golf courses designed by Alister MacKenzie, to restore the playability of the Sharp Park Golf Course, while documenting and preserving the historic character-defining features of the course and avoiding impacts to sensitive biological resources; this ~~which~~ would involve replacing Hole 12 either on the west (Option 1) or east (Option 2) side of Highway 1. Replacing the hole on the west side of Highway 1 may also require moving an additional hole west of the highway to retain playability and flow of the course, thereby increasing the number of holes west of the highway to 15 and decreasing to three the number of holes to the east. Creating a new hole east of Highway 1 would decrease the number of holes west of the highway to 13 and increase to five the number of holes to the east. The determination of where the replacement hole is constructed and whether additional holes need to be moved ~~would~~may require additional environmental review.

Section IV.D, Cultural and Paleontological Resources, contained an incorrect reference to Mitigation Measure M-RE-6, Restoration of the Sharp Park Golf Course to 18 Playable Holes, p. 264, as M-RE-1, which doesn't exist in the Draft EIR. Accordingly, the text on Draft EIR p. 238 and 239 has been changed as follows:

Mitigation Measure M-RE-~~6~~ would require SFRPD to coordinate with a golf course consultant with expertise in historic golf course renovation and with specific expertise, if possible, in golf courses designed by Alister MacKenzie, to restore the playability of the Sharp Park Golf course while documenting and preserving the historic character-defining features of the course and

avoiding impacts to sensitive biological resources. However, if any reconfiguration of the course resulted in additional holes east of Highway 1, this would result in a significant impact on the historical significance of Sharp Park Golf Course, further contributing to significant cumulative impacts. Reconfiguration of the golf course holes to resemble its original layout (replacement holes west of Highway 1) would reduce cumulative impacts on the golf course. This reconfiguration would result in a total of 15 holes on the west side of Highway 1 and three holes on the east side. Mitigation Measure M-RE-64 would be beneficial to the Sharp Park Golf Course because it would restore some of the elements in the original design of this course, such as coast side holes. This mitigation measure would change the layout of the holes, but the new holes would be in areas of the course where holes were situated in the original design, and would be in keeping with the historic boundaries of the golf course. While impacts to cultural resources were determined to be significant and unavoidable in terms of modifying Holes 10 and 13 and closing or replacing Hole 12, recreation impacts would be reduced to a less-than-significant level by retaining the golf course as an 18-hole course, as required by Draft EIR Mitigation Measure M-RE-6, Restoration of the Sharp Park Golf Course to 18 Playable Holes, Draft EIR p. 264.

Refer to Response CP-2, RTC p. 4-246, for a detailed discussion of the determination that the Golf Course retains its historic integrity, even with the modifications that have occurred over time. Refer also to Response AE-4, RTC p. 4-226, for a discussion of the aesthetic impacts associated with the Sharp Park Restoration project, and Response CP-2, RTC p. 4-246, for a discussion of what this proposed project entails (that is, golf course operations would not change over the long term as a result of the SNRAMP, however, the SNRAMP does propose changes to the management actions at Sharp Park in order to implement the proposed restoration activities).

Impacts Associated with Installation of the Temporary Fence

The temporary fence that the commenter mentions has been replaced with another temporary fence that is made of galvanized mesh with wooden posts. The purpose of this fence is to limit access to sensitive species habitat in compliance with the Biological Opinion for the Sharp Park Pumphouse Project. Draft EIR p. 223 specifically states that the purpose of the fence is to “discourage human and pet intrusion into the restored habitat area.” This fence is located along the top of the seawall, just east of the existing trail, running the entire length of the SFRPD property. After Hole 12 is closed and restored as coastal scrub/grassland habitat to support the San Francisco garter snake, the temporary fence would be removed and a permanent post-and-rail (or split rail) fence would be installed. The permanent post-and-rail fence would encircle the lagoon, as illustrated by Figure 3 of the Draft EIR, and would similarly limit access to sensitive species habitat in compliance with the Biological Opinion for the Sharp Park Pumphouse Project. The Draft EIR evaluated the potential for impacts to historic resources as a result of installing a permanent post-and-rail fence. Impact CP-8, provided on Draft EIR p. 223, determined that while construction of a fence would add a modern element to the course, it is not an original feature of the golf course and would not alter a historic character-defining feature of the course; therefore, impacts to the historic Sharp Park Golf Course would be less than significant.

One commenter also expressed concern about the potential conflict between the recreational use of the California Coastal Trail, which currently occupies the top of the sea wall, and the historical

resource of the Sharp Park Golf Course. As previously described, a temporary fence has been constructed along the eastern side of the sea wall, for the entire length of the SFRPD property, to prevent access to the Golf Course. This fence will be replaced with a permanent post-and-rail fence surrounding the lagoon, which would similarly prevent access to the Golf Course.

Disagreement Among Experts Regarding Impact Conclusions

Comments have been received disagreeing with the EIR's conclusion that raising Holes 10, 14, 15, and 18 or installation of new fencing would not constitute significant impact upon a historic resource. The main point of disagreement relates to the historic resource impact conclusions, with the commenter and the City coming to different conclusions presented with the same evidence contained in this record.

As stated in CEQA Guidelines Section 15151, assuming that the comments express the view of a qualified expert, "[d]isagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among experts. The courts have looked not for perfection but for adequacy, completeness and a good faith effort at full disclosure." This EIR summarizes the points of disagreement and provides substantiated conclusions in Impact CP-6, Draft EIR pp. 221 to 222, and Impact CP-8, Draft EIR p. 223, for the determination that raising Holes 10, 14, 15, and 18 and installing a new fence would result in less than significant impacts on cultural resources.

Comment CP-5	Modifications to mitigation measures
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The response to Comment CP-5 addresses all or part of the following individual comments:

HPC-1-02

HPC-1-03

- The HPC suggest that the mitigation measure described in M-CP-1 (Page 11) should be modified to specify that the future historic resource evaluations should be completed by a qualified professional landscape architectural historian. [HPC-1-02]
- The HPC suggests that the mitigation measure described in M-CP-7 (Page 13) should be modified to specify that a qualified professional landscape architectural historian should be retained to document the cultural landscape. [HPC-1-03]

Response CP-5

These comments suggest modifications to two Draft EIR mitigation measures: M-CP-1, Consultation with the San Francisco Planning Department, p. 219, and M-CP-7, Documentation of the Sharp Park Golf Course, p. 222.

As requested by the HPC, the text on Draft EIR pp. 11 and 219 and 13 and 222 to 223 has been changed, as follows:

- Mitigation Measure M-CP-1 on Draft EIR pp. 11 and 219:

M-CP-1: Consultation with the San Francisco Planning Department

The SFRPD would coordinate with the San Francisco Planning Department's Historic Preservation Specialists-Planners and would submit plans before constructing stabilizing and erosion control measures that require installation of structures, such as gabions, near ~~any~~ potentially eligible resources. Should it be determined that a Historic Resource Evaluation is required, that evaluation shall be completed by a qualified professional landscape architectural historian. The Planning Department would assist in determining if any proposed construction or other activities would impact identified historic resources under CEQA on a site-by-site basis; if such impacts may occur, the project would be required to be redesigned to avoid significant impacts to historic architectural resources. The Planning Department would also assess potential impacts on any historic landscapes that are present.

- Mitigation Measure M-CP-7, Documentation of the Sharp Park Golf Course, on Draft EIR pp. 13 and 222 to 223:

M-CP-7: Documentation of the Sharp Park Golf Course

The SFRPD ~~would document, or~~ would retain a consultant with expertise in historic golf course renovation and with specific expertise, if possible, in golf courses designed by Alister MacKenzie to document, and preserve the historic character-defining features of the Sharp Park Golf Course before wetland restoration activities take place. The National Park Service has published guidance for preserving cultural landscapes in Preservation Brief 36: Protecting Cultural Landscapes, Planning, Treatment, and Management of Historic Landscapes and in the more complete Secretary of the Interior's Standards for the Treatment of Historic Properties Guidelines for the Treatment of Cultural Landscapes. The appropriate level of documentation would be selected by a qualified professional landscape architectural historian who meets the standards for history, architectural history, or architecture (as appropriate) set forth by the Secretary of the Interior's Professional Qualification Standards, (36 CFR, Part 61). The documentation would consist of the following:

- Full sets of measured drawings depicting existing or historic conditions of the Sharp Park Golf Course;
- Digital photographs of the Sharp Park Golf Course;
- A written history and description of the Sharp Park Golf Course and its alterations.

The professional landscape architectural historian would prepare the documentation and submit it for review and approval by a San Francisco Planning Department Preservation Specialist. The documentation would be disseminated to the San Francisco Library History Room and the SFRPD Headquarters.

Comment CP-6 Research recommendations for archaeological resources analysis

The response to Comment CP-6 addresses all or part of the following individual comment:

NAHC-1-01

- The Native American Heritage Commission (NAHC) has reviewed the Notice of Completion (NOC) referenced above. The California Environmental Quality Act (CEQA) states that any

project that causes a substantial adverse change in the significance of an historical resource, which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA Guidelines Section 15064(b)). To comply with this provision the lead agency is required to assess whether the project will have an adverse impact on historical resources within the area of project effect (APE), and if so to mitigate that effect. To adequately assess and mitigate project-related impacts to archaeological resources, the NAHC recommends the following actions:

- > Contact the appropriate regional archaeological Information Center for a record search. The record search will determine:
 - If a part or all of the area of project effect (APE) has been previously surveyed for cultural resources.
 - If any known cultural resources have already been recorded on or adjacent to the APE.
 - If the probability is low, moderate, or high that cultural resources are located in the APE.
 - If a survey is required to determine whether previously unrecorded cultural resources are present.
- > If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure.
 - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.
- > Contact the Native American Heritage Commission for:
 - A Sacred Lands File Check. USGS 7.5 minute quadrangle name, township, range and section required.
 - A list of appropriate Native American contacts for consultation concerning the project site and to assist in the mitigation measures. Native American Contacts List attached.
- > Lack of surface evidence of archeological resources does not preclude their subsurface existence.
 - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological

sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.

- Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
- Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery. [NAHC-1-01]

Response CP-6

This comment from the Native American Heritage Commission suggests what is required to adequately assess and mitigate project-related impacts to archaeological resources.

As stated in the Draft EIR, impacts on Native American burials are considered under California PRC Section 15064.5(d)(1). The SFRPD's treatment of human remains and of associated or unassociated funerary objects discovered during any soils-disturbing activity would comply with applicable state laws and Draft EIR Mitigation Measure M-CP-18, Human Remains, Associated or Unassociated Funerary Objects, p. 236.

The Native American Heritage Commission (NAHC) was contacted to determine the presence of sacred sites within or near the proposed project areas that could qualify as historical or unique archaeological resources or contain human burials. The NAHC responded on June 19, 2008, that no such resources were identified in their files; however, the NAHC did provide a list of five Ohlone/Costanoan groups and individuals traditionally affiliated with the region that may be able to identify undocumented resources. SFRPD mailed consultation letters to the suggested contacts on July 17, 2008. No responses to the consultation letters were received.

As stated in the Draft EIR, in order to determine project impacts on the various types of cultural resources, records searches were conducted in June and October 2008 from the California Historical Resources Information System's Northwest Information Center (NWIC) at Sonoma State University (File Nos. 07-1792 and 08-0414). A third records search was requested in November 2009 for the Everson/Digby Natural Area (File No. 09-0630).

The potential for, and the degree of, impacts on archaeological resources included in the EIR were based on the archaeological sensitivity of each Natural Area, weighed against the varying types of activities proposed in the SNRAMP and the severity of surface disturbance involved. Draft EIR Mitigation Measure M-CP-10, Archaeological Monitoring Program for Programmatic Projects in Natural Areas with High Archaeological Sensitivity, Routine Maintenance Activities at Tank Hill and Lake Merced, and the Sharp Park Restoration Project, p. 225, was included in the EIR to address potential archeological impacts to resources of high sensitivity. This mitigation measure includes an

archaeological monitoring program (AMP) to avoid any potential adverse effect to archaeological resources as defined in CEQA Guidelines Section 15064.5(a)(c). The full text of this mitigation measure is included in Draft EIR Section V.D.3, Impacts, p. 225. Additionally, Draft EIR Mitigation Measure M-CP-11, Accidental Discovery, p. 229, was also included in the EIR to address potential resources in Natural Areas with moderate to low archeological sensitivity. Draft EIR Mitigation Measure M-CP-12, Annual Archeological Sensitivity Training for Natural Areas Program Staff Involved with Routine Maintenance Activities in All Natural Areas, p. 231, would require SFRPD to provide training to staff on the archeological sensitivity levels of each Natural Area, the potential to encounter archeological resources, instructions for reporting observed looting, an overview of the AMP and accidental discovery procedures, and an overview of Mitigation Measure M-CP-18, Human Remains, Associated or Unassociated Funerary Objects, p. 236, for the treatment of human remains and associated or unassociated funerary objects.

The Draft EIR mitigation measures, which the proposed project is required to adhere to, include the actions recommended by the NAHC in their comment above.

Comment CP-7 Preservation of the Sharp Park Golf Course

The response to Comment CP-7 addresses all or part of the following individual comment:

WGF-1-01

- I am writing to you in support of the preservation of Sharp Park Golf Course as we know it today. Sharp Park Golf Course, designed by Master Architect, Dr. Alister MacKenzie, is an historical property, an important part of San Francisco's history, and should be safeguarded from any significant modifications that will change its architectural integrity.

Please do not allow the proposed alteration projects to occur. [WGF-1-01]

Response CP-7

This comment expresses support for a project that does not result in modifications to the Sharp Park Golf Course. The EIR analyzes three alternatives to the proposed project that would not modify the golf course: No Project, Maximum Recreation, and Maintenance Alternatives. These alternatives and their potential environmental impacts are addressed in Draft EIR Chapter VII, Alternatives, beginning on p. 461.

As identified in the Draft EIR, modifications to the Sharp Park Golf Course as a result of the Sharp Park restoration project would cause significant and unavoidable adverse impacts to the course, a historic resource. Draft EIR Mitigation Measures M-CP-7, Documentation of the Sharp Park Golf Course, p. 222, and M-RE-6, Restoration of the Sharp Park Golf Course to 18 Playable Holes, p. 264, have been identified, though they would not sufficiently reduce the impacts to a less-than-significant level. As such, the Draft EIR determined that impacts to the Sharp Park Golf Course would be significant and unavoidable. Prior to approving the restoration project at Sharp Park, the

Recreation & Park Commission would be required to adopt a statement of overriding considerations in order to approve the project as proposed.

These comments do not raise any specific issues about the adequacy or accuracy of the EIR's coverage of environmental impacts that require a response in this RTC document under CEQA Guidelines Section 15088. Comments in support of an EIR alternative over the proposed project will be considered by the decision makers as part of their decision to approve, modify, or disapprove the proposed project. This consideration is carried out independent of the environmental review process.

Comment CP-8	Impacts of tree removal on historic Mount Davidson Area
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The response to Comment CP-8 addresses all or part of the following individual comments:

MPIC-1-05

MPIC-2-04

MPIC-2-09

- The SNRAP project described in the DEIR will significantly negatively impact this historic forest because (1) it proposes that replacement trees can be planted anywhere in San Francisco, rather than in the Park in the location of trees removed; (2) it specifies replacement of trees removed with oaks rather than the historic forest species; and (3) it lacks any plan for replanting the remaining trees (i.e., those trees not subject to planned removal) as the existing historic species reach the end of their lifespan. [MPIC-1-05]
- The DEIR's conclusion that the tree removal on Mount Davidson Park would have less than significant impact on this historic landscape and forest is based on incomplete analysis. Much of the inaccuracy of the analysis is stated on page 191 of the DEIR:

“The assumption that the SFRPD intends to spread the overall tree removal across the forested portion of a Natural Area and would not concentrate it in a particular location ... Removing clusters of 20 or more trees over half an acre would still leave the surrounding forest and its aesthetic value intact. Also no Landmark Trees would be removed or altered.”

This assumption is inconsistent with Appendix F of the SNRAMP, page 14, which indicates plans to remove trees in a concentrated area of 10.2 acres in order to convert 1/3 of the current 30.1 acre forest into a grass and scrub landscape. It indicates that a substantial amount equal to 82% of the trees in the 3.5-acre MA-1c zone would be removed. Two other zones within the 10.2-acre relandscaping area would lose 23-31% of their trees. This 10.2 acres would in fact lose substantially more than 40 trees per acre, as stated in the DEIR page 195. The MA-1c zone would lose 286 trees per acre, MA-2c 111 trees per acre, and MA-2e 82 trees per acre. These areas would be substantially reduced from the current 350 trees per acre to as low as 63 trees per acre in what amounts to deforestation – not thinning. Statements that only sick and dead trees would be removed are inconsistent with the reality that any person looking at this area of the park could not agree that 82% of the trees are in this condition now.

Removing the trees over a 20-year period would not mitigate the substantial, cumulative, negative environmental impact. There are errors in the SNRAMP that were not addressed or corrected, as on Appendix F, page 8, for example: “The bulk of the tree removal [on Mount Davidson] will occur in MA-2e ...” – inconsistent with page 14, which lists 23% for MA-2e, the least planned tree removal. [MPIC-2-04]

- MPIC agrees with the DEIR that a major reforestation effort should be undertaken by the City to rejuvenate Mt. Davidson Park’s historic forest canopy. This should be a higher budget priority than tree destruction. The DEIR is deficient in documenting the scientific source for its statement that the proposed concentrated tree removal on Mt. Davidson will in fact make the remaining forest areas healthier than would improved maintenance – such as clearance of ivy, trimming of potentially hazardous branches, and replanting of new trees of the same species to rejuvenate the forest, rather than allowing it to die from neglect. The DEIR should include as detailed a forest management plan for the MA-3 area of the park as it does for the vegetation of the MA-1 and MA-2 areas. It should further recommend that management of the MA-3 zones be transferred to the Recreation and Park Department’s Urban Forestry Division, because Natural Areas Program staff lack the arborist and forestry expertise necessary to properly maintain the forest. [MPIC-2-09]

Response CP-8

These comments express concern about impacts on the historic forest at Mount Davidson by the proposed SNRAMP activities. Some commenters suggest that a major reforestation effort, including a detailed forest management plan, should be undertaken by SFRPD to rejuvenate Mount Davidson Park’s historic forest canopy.

As stated in Appendix F of the SNRAMP (SNRAMP Table F-1, p. F-14), the tree removal proposed for Mount Davidson represents less than 15 percent of the existing invasive, nonnative trees, calculated as 1,600 trees to be removed out of 11,000 existing trees; the trees within the existing forest stands would be thinned, not clear cut. Further, the tree removal is concentrated in three of the seven total management areas (MA-1c, MA-2c, and MA-2e), all of which are predominantly in the interior portions of Mount Davidson, making the tree removal less visible from surrounding vantage points. Refer to Response PD-20, RTC p. 4-192, for a discussion of where the greatest tree removal would occur within Mount Davidson.

As discussed under Impact CP-2 of the Draft EIR, and as further discussed in Response CP-9, RTC p. 4-270, invasive tree removal and planting activities would not materially affect their significance as historic resources. Impacts to these potential historic resources through tree removal, which is detailed in Chapter III and the Urban Forestry Statements in Appendix F of the SNRAMP, “could be beneficial to potential historic urban forests or historic landscapes because removing trees (through thinning and group selection) while maintaining the existing forest (which would occur in MA-3) would improve the health of the forest by relieving crowding and encouraging growth.” Similarly, on Draft EIR p. 220, Impact CP-2 concludes that “invasive tree and vegetation removal would not

result in a substantial adverse change in the significance of historic landscapes or historic forests and this impact would be *less than significant.*"

As discussed in Draft EIR Chapter III, Project Description, p. 92, the SFRPD would consider views from Natural Areas when locations are being selected for new trees; in fact, the location of replacement trees in San Francisco Natural Areas would be selected to preserve and maintain views from important points, as identified in several of the SNRAMP's management actions. The trees planned for removal are invasive species and are not native species or landmark trees. Some of the replacement trees would be oak species because oak woodland habitat is dominant within the region, and is also native. Other species would include, but are not limited to, California Bay laurel and California wax myrtle.

The stated goals of SNRAMP are to reestablish native community diversity, structure, and ecosystem function while also developing aesthetically pleasing landscapes that are consistent with surrounding landscapes and that create natural transitions. The SNRAMP also contains goals which include active monitoring of the Natural Areas in order to detect changes in species richness as well as to continually monitor the health and status of native communities and sensitive habitats. The SNRAMP provides a framework for adaptive management of the Natural Areas which would allow the SFRPD to replace native trees when needed. There is no plan to replant invasive eucalyptus trees as they die, which would be the case either with or without the project and, therefore, is not an impact of the project itself.

Comment CP-9	Inadequate/Incomplete HRER for Mount Davidson
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The response to Comment CP-9 addresses all or part of the following individual comments:

MPIC-2-05

MPIC-2-15

- While The Historic Resource Evaluation Report (HRER) in the DEIR declares the landscape historic, the analysis is limited to the retaining walls and steps. A cultural landscape study is required to evaluate the historical significance of the forest landscape and the impact of the project on this significant resource, as requested by the MPIC letter regarding the SNRAMP Initial Study. All of the environmental impact conclusions of the DEIR regarding Mt. Davidson Park require additional analysis to address the concentrated historic tree clearing actually proposed in the SNRAMP for Mt. Davidson.

III. Cultural Landscape and Recreational Resource

The Historic Resource Evaluation Response (HRER) for the SNRAP confirms that Mt. Davidson Park is an historic landscape resource and potentially eligible for listing under the CA Register as an ethnographic landscape, but this study focuses primarily on the retaining wall and steps. A cultural landscape study is also required to address the significant historic resource created by the forest planted by Adolph Sutro, and how its existence led to the Easter sunrise event and the creation of a public park to protect the forest. This forest is also a significant part of the cultural landscape of the West of Twin Peaks District. Historic trails

should be documented and preserved for public access in the SNRAMP. The cultural landscape study should be completed by a cultural landscape architect, as described in National Park Service Preservation Brief 36:

“Protection of Cultural Landscapes: historical research; inventory and documentation of existing conditions; site analysis and evaluation of integrity and significance; development of a cultural landscape preservation approach and treatment plan; development of a cultural landscape management plan and management philosophy; the development of a strategy for ongoing maintenance; and preparation of a record of treatment and future research recommendations.”

The cultural landscape study should reference and consider the content of the pre-existing rating and survey report to the San Francisco Landmarks Board dated 2/5/1997 regarding the Mount Davidson Cross and Park, as follows.

“In San Francisco, where row-housing predominates and vegetation in any degree of positive impact – if existent at all – is found principally in shallow front yards or strips, or on the interior of blocks where it is screened from public view by allees of eucalyptus trees on the slopes of Mount Davidson. Below the summit itself nestle domestic architecture in a sustained garden-like setting which climbs ever higher to culminate in 32 acres of park-like wilderness. The simplicity of the monument is played artfully against the natural appearing surroundings. Its setting significantly contributes to the definition of the West of Twin Peaks locale.” (Section 11. Setting)

The cultural landscape study should also consider the analysis done in April 1991 by Marie Bolton for the City Attorney as part of the lawsuit regarding the cross at the summit of Mt. Davidson, “The Contemplative Ideal in a Public Space: The Cross at Mt. Davidson Park, San Francisco, 1923-1990.” Ms. Bolton documents that:

“On Feb. 23, 1910 members of the Sierra Club hiked into what then called ‘the little wildernesses of the Sutro Forest,’ and held a ceremony renaming the peak in honor of George P. Davidson, who had been greatly respected for his incorruptibility as a surveyor and for his many contributions as a geologist. noted surveyor and naturalist, at the request of the Sierra Club.

“... The Sierra Club was supportive of the park because it was concerned about development, which threatened to obliterate the trees planted by Adolph Sutro ... In creating this park, the city was building on its earlier tradition of setting aside land for parks and recreational purposes ... At the dedication ceremony in 1929, three Monterey pines were planted to honor [Mayor Rolph, John McLaren, and Mrs. Edmund Brown].”

[MPIC-2-05]

- The HRER is incorrect as to the date of the concrete cross construction. It was 1934, not 1929 (earlier wood crosses had been erected since 1923).

Bolton further documents:

“Decatur [the founder of the annual Easter sunrise event] described the ‘solitude of the forest’ on Mt. Davidson as conveying ‘a sense of vastness quite as real as one would experience among the age-old monarchs of the High Sierras’... Decatur was moved to make Mt. Davidson serve as a place of tranquility for the citizens of the Bay Area, a refuge from what was often seen in the 1920s and 1930s as the increasingly debilitating effects of city life.”

San Francisco is now has 100,000 more residents and plans to further increase the city’s residential density.

The HRER conclusion that the SNRAMP project will not result in a substantial adverse changes to this historic cultural landscape and forest is based on incomplete analysis. The SNRAMP project will significantly negatively impact this historic forest because (1) Appendix J of the DEIR states that replacement trees can be planted anywhere in San Francisco, rather than in the Park or at the specific location of trees removed; (2) SNRAMP specifies replacement of trees removed with oaks rather than the historic forest species; and (3) it lacks any plan for restoring the remaining forest in the MA-3a zone as the existing historic species reach the end of their lifespan. Furthermore, the project map (see Exhibit A) indicates that areas where tree removal would be concentrated are the most visible areas as seen from **within the Park**, which is a major scenic and historic resource for Park visitors as well as residents of surrounding communities. Concentrated tree removal in these highly visible areas along major trails and sightlines within the Park will be very detrimental to enjoyment of the Park by its users. This goal is also inconsistent with historic Park uses and purpose. The purpose of the acquisition of the land by the City as a public park was to preserve the forest and provide for the recreation needs of the West of Twin Peaks District. A report to the Finance Committee of the Board of Supervisors dated 4/29/1927 confirms this:

“At the request of your Committee made at the last session, we are submitting herewith a report of such data as we have been able to get in reference to the Mount Davidson Park Project, together with our recommendations.

(1) Purposes of Acquisition: As stated to your Honorable Committee at the last meeting the purpose of the proposed acquisition of lands on the summit of Mount Davidson is for a public park serving the needs of the West of Twin Peaks District and also serving as a recreation center and **forest play ground** for the whole city. **The acquisition will also preserve for all time the beautiful tree covered slopes of the mountain** as an attractive scenic land mark in the city and will help perpetuate the annual Easter Pilgrimage tradition.”

The HRER does not document the significance of what may be the first grass-roots campaign in San Francisco to preserve as a public park an area zoned for development. Led by Madie Brown and San Francisco’s Women’s Clubs, this campaign to preserve the area as a public

park in 1926, was an example of the open-space movement that Richard Walker documents in his book *The City in the Country* (2008): “Out of 4.5 million acres in the 9-county region, more than 3.5 million are open space – thanks to a century-old environmental movement – primarily led by women ... Every acre of land and water has been fought for, often, in campaigns lasting years.” The campaign by Mrs. Edmund Brown and the Mt. Davidson Conservation Committee that began “when the subdividers’ axe and steam shovel were heard on Mt. Davidson’s lower slopes, destroying in ruthless fashion the beauties of nature,” took three years. The 4/26/1927 *Examiner* wrote an editorial in support of purchasing the land for park ... “As the residential area advances, **the forest** goes down before the axe. In another year, it will be too late for the beauty of the summit to be preserved...” The 6/24/1927 *Examiner* reported on the ground breaking ceremonies for the park and quoted the president of the West Park Association as pointing out that “the plan [at Mt. Davidson] is to **preserve as many of the trees as possible.**” The April 1928 issue of *The Municipal Employee*, a city publication, described the purpose of the campaign as: “to preserve for San Francisco this **wooded** hill, Mt. Davidson ...”

The *San Francisco Chronicle* report on the dedication of the park on 12/9/1929 described how Mrs. Edmund Brown had researched the history of the site and

“brought to light the fact that the mountain was not always covered with **stately trees** ... it was but a barren, rocky hill ... [when] “part of the property owned by Adolph Sutro, Joaquin Miller, the poet who was enthusiastically planting trees on ‘The Heights’ in the east bay, envisioned the beauty that might be created by trees on the San Miguel Hills and suggested the plan to Sutro ... [who] planted thousands of tiny trees: cedars, pines, and eucalyptus.”

Richard Walker credits Joaquin Miller as being one of the first to promote preservation of the forests in the Sierra Nevada. The San Francisco Garden Club published vignettes of early San Francisco homes and gardens in December 1935. It quoted from the notes of Emma Sutro:

“There is an account in Joaquin Miller’s Poetical Works of the first Arbor Day in San Francisco, celebrated on Nov. 27, 1886. The celebration was promoted by Joaquin Miller, Adolph Sutro, General Vallejo and General O. O. Howard ... Adolph Sutro, as his contribution to the first Arbor Day, gave 50,000 trees to be planted by the school children of Oakland and San Francisco. Climate has been modified and many a sandy bare monotone in San Francisco has been beautified by the massed dark accent of Mr. Sutro’s trees.”

Mount Davidson Park, among the last remnants in San Francisco of this historic forest that once extended from Ocean Avenue north to Mt. Sutro and was planted to celebrate CA’s first Arbor Day and to beautify the City, has been preserved in a City park. The forest has significant historical associations and defines the character of the surrounding neighborhoods. The size and age of the trees are significant and they provide a prominent landscape feature in West of Twin Peaks, especially for Miraloma Park residents. The experience of the forest led to initiation of the historic Easter sunrise event and the residents’ campaign to preserve it as public park. Without the forest, there would be no native plants

left to protect and the land would be covered with housing. The forest in Mount Davidson Park meets most criteria for protection by the Landmark Tree Ordinance: visual, cultural, ecological, and locational characteristics. The Recreation and Parks Department should fulfill its stewardship responsibility and recommend to the Urban Forestry Council designation of the 30.1 acre forest in Mt. Davidson Park for Landmark status.

A structural engineer should evaluate the historic retaining walls before embarking on the 2008 Park Bond work planned for this area. The HRER notes that the mature vegetation growing on these walls and stairs is historic. The trees along these features should therefore be protected. The forest is also holding the steep slopes of Mt. Davidson intact. The DEIR on page 219 acknowledges that extensive erosion control structures would create an additional substantial adverse impact on this cultural resource. Whether these structures would be necessary if the concentrated tree clearing is implemented should be addressed in the EIR. [MPIC-2-15]

Response CP-9

These comments question the adequacy of the HRER for Mount Davidson, citing concerns about the scope of the report (and the fact that it should be expanded to address cultural landscapes); whether additional data and analysis should be considered, such as the pre-existing rating and survey report dated 2/5/1997 and the analysis completed in 1991 by Marie Bolton for the City Attorney as part of the lawsuit regarding the cross at the summit of Mount Davidson; whether a structural engineer should evaluate the historic retaining walls before any work proceeds; and generally question the impact conclusions.

Historic Resources Evaluation Response

A Historic Resources Evaluation Response (HRER) (January 12, 2011) was completed by Shelley Caltagirone (Historic Preservation Planner, San Francisco Planning Department) to identify whether any historic resources are present at Mt. Davidson and to address potential impacts caused by implementation of the SNRAMP.

With respect to the urban forest at Mount Davidson, the HRER states that:

“Tetra Tech also prepared a memorandum describing the history of the urban forest located at Mount Davidson and the establishment of the city park in this location. Based upon this information the Planning Department finds that the Mount Davidson natural area is potentially eligible for listing on the California Register under Criteria 1 (Event) and 2 (Persons) as an ethnographic landscape. Although further research is required to establish a full historic context for the site, Mount Davidson is a prominent topographical feature in San Francisco that has historically held special natural and cultural significance for the city. The site is associated with local philanthropist Adolph Sutro, with an annual Easter ceremony established in 1923, and with the early development of natural areas dedicated to recreational use within San Francisco. For

these reasons, the natural area will be considered a historic resource for the purposes of this review.”

Importantly, the historic resources evaluation of the urban forest at Mount Davidson was conducted for the whole of Mount Davidson and identifies the resource’s character-defining features. The HRER for the urban forest at Mount Davidson states that “The character-defining features of the Mount Davidson historic landscape appear to be the WPA-era hardscape retaining walls and stairs; the Sutro forest, composed of pine, cypress, and eucalyptus; and the Mount Davidson Cross.” Additionally, the WPA-era retaining walls and staircases (or steps) were separately found to be individually eligible for listing on the California Register under Criteria 1 (Event) and 3 (Architecture) for their association with WPA/New Deal Construction. The HRER further acknowledged that the SNRAMP proposes no changes to the retaining walls, the steps, or the Cross. The HRER also concluded that the Mount Davidson cross, which was erected in 1929 and has been privately owned since 1997, is not considered part of the Mount Davidson Natural Area.

In terms of the integrity of the historic landscape, the HRER states that “the historic landscape also appears to be intact and to display the same range of vegetation first established in Sutro Forest in 1885. As is expected in a living landscape, the forest has grown over time; however this change does not diminish the integrity of the site.” From a long-range visual perspective, the landscape appears to be largely unchanged when comparing historic photographs of the site (taken in 1934) with more recent photographs of the site (taken in 2006), as provided on the Found SF website (http://foundsf.org/index.php?title=Mt_Davidson). However, closer range views of the site show that the forest has grown over time, resulting in a predominance of nonnative eucalyptus trees, rather than a historic balance of tree species.

The proposed thinning of the Sutro forest, identified in the HRER as a character-defining feature of the Mount Davidson historic landscape, would not result in a substantial adverse change such that the significance of the landscape would be impaired (PRC Section 5020.1(q)). The HRER concludes that:

“Staff has reviewed the proposed project and found that the work will not result in any significant changes to the historic landscape or its hardscape features. The selective tree removal will help to restore the historic balance of tree species within the forest and will preserve its historic character. Moreover, the historic landscape’s use as a public park will be preserved. Therefore, the project will not cause a substantial adverse change in the significance of the resource.”

The same conclusion was reached in the analysis provided in Impact CP-2 on Draft EIR p. 219, which concludes that:

“Impact AE-1 in the Aesthetics section addresses the tree removal at Mount Davidson and Sharp Park and concludes that invasive tree and vegetation removal would not be noticeable at these Natural Areas and therefore it would not materially affect their

significance as historic resources. Impacts to these potential historic resources through tree removal, which is detailed in Chapter III and the Urban Forestry Statements in Appendix F of the SNRAMP, could be beneficial to potential historic urban forests or historic landscapes because removing trees (through thinning and group selection) while maintaining the existing forest (which would occur in MA-3) would improve the health of the forest by relieving crowding and encouraging growth.”

Similarly, on Draft EIR p. 220, Impact CP-2 concludes that “invasive tree and vegetation removal would not result in a substantial adverse change in the significance of historic landscapes or historic forests and this impact would be *less than significant*.” Figures 5 and 6 of the Draft EIR, provided on Draft EIR pp. 193 and 194, further substantiates this conclusion.

The HRER goes on to provide additional information supporting the conclusion that the site is potentially eligible for listing on the California Register under Criteria 1 (Event) and 2 (Persons) as an ethnographic landscape:

“Sutro, known for his Comstock Lode engineering and as a philanthropist, and specifically his conservationist activities, purchased the Mount Davidson (then known as Blue Mountain) property in 1881 and began planting the forest circa 1885. This activity occurred around the same time that Sutro was helping to organize the first California Arbor Day held in 1886. The original forest was planted with pine, cypress, and eucalyptus trees; however, over time the eucalyptus have begun to dominate and have occasionally been thinned to retain the diversity of the forest. The property was transferred to A.S. Baldwin in 1909. During this time the mountain was given the name ‘Mount Davidson’, and the first public trails were established on the property. In 1923 the first Easter ceremony was held at the top of the mountain, beginning the tradition which continues through today. The property was finally purchased by the City in 1927 and the land was dedicated as a city park in 1929. In the same year as the park dedication, a permanent cross was constructed at the mountaintop for the yearly Easter services. As noted above the park became the site of a WPA-era work project between 1936-1943. Based upon these facts, the period of significance for the potential historic landscape would appear to be 1885-1943, beginning with the forest planting and extending through to what appears to be the last major improvement project for the park.”

As the commenter states, the Park is also associated with what may be the first grass-roots campaign in San Francisco (led by Madie Brown and San Francisco Women’s Clubs) to preserve an area that was otherwise slated for development. This effort was documented in a 2008 book by Richard Walker entitled “The City in the Country,” and the campaign was also documented in an editorial and news report in the *San Francisco Examiner* in 1927 and in *The Municipal Employee*, another City publication in 1928. All of this information further supports the potential eligibility for listing on the California Register under Criteria 1 (Event) and 2 (Persons) as an ethnographic landscape.

The commenters also mentioned two studies: one, the pre-existing rating and survey report to the San Francisco Landmarks Board dated 2/5/1997 regarding the Mount Davidson Cross and Park and the other, the analysis done in April 1991 by Marie Bolton for the City Attorney as part of the lawsuit regarding the cross at the summit of Mt. Davidson, titled "The Contemplative Ideal in a Public Space: The Cross at Mt. Davidson Park, San Francisco, 1923–1990." The first study, addressing the Mount Davidson Cross and Park, indicates that the simplicity of the monument significantly contributes to the definition of the West of Twin Peaks locale. As previously mentioned, the Cross is not part of the Natural Area and the vast majority of the thinning would occur to the west of the Cross, where views of the Cross are not predominant. The simplicity of the Cross as a background setting looking to the west from the eastern portion of the city would remain after implementation of the SNRAMP.

The analysis completed in April 1991 by Marie Bolton made several statements that are supported in the HRER for Mount Davidson. Ms. Bolton stated that "[i]n creating this park, the city was building on its earlier tradition of setting aside land for parks and recreational purposes." Other statements by Ms. Bolton reflected the importance of the trees planted by Sutro; the dedication of three Monterey pines in honor of Mayor Rolph, John McLaren, and Mrs. Edmund Brown; and the recognition of Mount Davidson as a place of tranquility, as originally reflected by Decatur, who founded the annual Easter sunrise event. All of this information was considered in the HRER and led to determination that the urban forest at Mount Davidson is a historic landscape and is potentially eligible for the California Register as an ethnographic landscape. Further, the commenter's quotes from the San Francisco Landmarks Board (2/5/1997) and Bolton (1991) are now contained in the record for this project and, accordingly, will be reviewed and considered by the decision makers prior to approving or denying the project.

In summary, the HRER identified and evaluated the urban forest at Mount Davidson as potentially eligible for listing on the California Register under Criteria 1 (Event) and 2 (Persons) as an ethnographic landscape and treated it as a historic urban forest or historic landscape, as the commenter notes. The Draft EIR concluded that impacts were less than significant because the project would not cause a substantial adverse change in the significance of the resource.

Also, the comment that the HRER is incorrect as to the date of concrete cross was constructed, which was 1934 rather than 1929, is noted.

Cultural Landscapes

There are four types of cultural landscapes according to the Cultural Landscape Foundation⁵⁹ (and a site can fall under more than one category):

- **Historic Site (or Historic Landscape):** a landscape significant for its association with a historic event, activity, or person.
- **Ethnographic Landscape:** a landscape containing a variety of natural and cultural resources that the associated people define as heritage resources.
- **Vernacular Landscape:** a landscape that evolved through use by the people whose activities or occupancy shaped that landscape. Through social or cultural attitudes of an individual, family or a community, the landscape reflects the physical, biological, and cultural character of those everyday lives.
- **Designed Landscape:** a landscape that was consciously designed or laid out by a landscape architect, master gardener, architect or horticulturist according to design principles or an amateur gardener working in a recognized style or tradition.

As previously stated, the HREER identified and evaluated the urban forest at Mount Davidson as an ethnographic landscape and treated it as a historic urban forest or historic landscape. The fact that the forest has existed since approximately 1885 and has since taken on importance to the City and the local residents could also give it standing as a vernacular landscape. According to NPS Preservation Brief 36, a historic vernacular landscape is “a landscape that evolved through use by the people whose activities or occupancy shaped that landscape. Through social or cultural attitudes of an individual, family or a community, the landscape reflects the physical, biological, and cultural character of those everyday lives. Function plays a significant role in vernacular landscapes. They can be a single property such as a farm or a collection of properties such as a district of historic farms along a river valley.” Several features or events could qualify Mount Davidson as a vernacular landscape: (1) the citizens’ campaign to preserve Mount Davidson as a public park; (2) the site’s home to the 1934 Mount Davidson Cross and the annual Easter sunrise service (that began in 1923); (3) the use of the Park as a place for recreation and contemplation; and (4) as a place that supports a rich biological community that would be enhanced through implementation of the SNRAMP. The essential function of Mount Davidson would not change with implementation of the SNRAMP. The cross would remain, the Easter services would be held, recreational activities would continue to be promoted, biological diversity would increase, the urban forest would be maintained according to SNRAMP principles and recommendations, and views of the site would not be materially altered, as concluded in the Draft EIR and illustrated by Draft EIR Figure 5 and 6, pp. 193 and 194. Further, if the site were classified as a vernacular landscape, it would be afforded no more or different

⁵⁹ <http://tclf.org/landscapes/what-are-cultural-landscapes>, accessed on August 8, 2015.

protection than is offered by its classification as an ethnographic landscape or historic landscape or site.

Lastly, this site would likely not qualify as a designed landscape because there is insufficient evidence to demonstrate that it was consciously designed or laid out according to specific design principles or recognized landscape styles or traditions; however, the site's potential designation as a vernacular landscape is evaluated in this response.

The text on Draft EIR pp. 219 and 220 has been changed as follows to include pertinent text provided in this response:

Impact CP-2. Invasive tree and vegetation removal and planting activities, as part of programmatic projects, would not result in a substantial adverse change in the significance of cultural ~~historic~~ landscapes or urban forests. (Less than Significant)

Several of the management activities proposed in the SNRAMP could adversely affect any present historical architectural resources. In addition to those discussed above, adverse effects could also result from vegetation changes within a Natural Area that may alter potential cultural ~~historic~~ landscapes.

There are four types of cultural landscapes according to the Cultural Landscape Foundation⁶⁰ (and a site can fall under more than one category):

- **Historic Site (or Historic Landscape):** a landscape significant for its association with a historic event, activity, or person.
- **Ethnographic Landscape:** a landscape containing a variety of natural and cultural resources that the associated people define as heritage resources.
- **Vernacular Landscape:** a landscape that evolved through use by the people whose activities or occupancy shaped that landscape. Through social or cultural attitudes of an individual, family or a community, the landscape reflects the physical, biological, and cultural character of those everyday lives.
- **Designed Landscape:** a landscape that was consciously designed or laid out by a landscape architect, master gardener, architect or horticulturist according to design principles or an amateur gardener working in a recognized style or tradition.

Such changes include tree removal, which is proposed for 15 of the 32 Natural Areas and affects approximately 16 percent of the invasive trees in urban forests (San Francisco Park and Recreation Department 2006). As mentioned above, the Natural Areas that contain urban forest stands are Lake Merced, Glen Canyon Park, Bayview Park, McLaren Park, Mount Davidson, Interior Greenbelt, Dorothy Erskine Park, Corona Heights, and Sharp Park. These stands have not been evaluated for their historic significance; therefore, they are treated as potentially historic urban forests or historic landscapes.

Impact AE-1 in the Aesthetics section addresses the tree removal at Mount Davidson and Sharp Park and concludes that invasive tree and vegetation removal would not be noticeable at these Natural Areas and therefore it would not materially affect their significance as historic resources. Impacts to these potential historic resources through tree removal, which is detailed in Chapter III

⁶⁰ <http://tclf.org/landscapes/what-are-cultural-landscapes>, accessed on August 8, 2015.

and in the Urban Forestry Statements in Appendix F of the SNRAMP, “could be beneficial to potential historic urban forests or historic landscapes because removing trees (through thinning and group selection) while maintaining the existing forest (which would occur in MA-3) would improve the health of the forest by relieving crowding and encouraging growth.” Other Natural Areas would experience less tree removal than Sharp Park and Mount Davidson, and, as a result, would experience lower impacts.

An HRER was prepared for Mount Davidson, and it was determined that invasive tree and vegetation removal as well as planting activities will not result in any significant changes to the historic or ethnographic landscape at Mount Davidson (CCSF 2011a). Selective tree removal would help to restore the historic balance of tree species within the forest and preserve its historic character. The project would not cause a substantial adverse change in the significance of the resource such that the significance of the resource would be materially impaired. For the other San Francisco Natural Areas containing urban forest stands, there would be a relatively lower amount of tree removal than Mount Davidson, and, as a result, similar or lower impacts to potentially historic landscapes.

The HRER provides additional information supporting the conclusion that the site is potentially eligible for listing on the California Register under Criteria 1 (Event) and 2 (Persons) as an ethnographic landscape:

Sutro, known for his Comstock Lode engineering and as a philanthropist, and specifically his conservationist activities, purchased the Mount Davidson (then known as Blue Mountain) property in 1881 and began planting the forest circa 1885. This activity occurred around the same time that Sutro was helping to organize the first California Arbor Day held in 1886. The original forest was planted with pine, cypress, and eucalyptus trees; however, over time the eucalyptus have begun to dominate and have occasionally been thinned to retain the diversity of the forest. The property was transferred to A.S. Baldwin in 1909. During this time the mountain was given the name ‘Mount Davidson’, and the first public trails were established on the property. In 1923 the first Easter ceremony was held at the top of the mountain, beginning the tradition which continues through today. The property was finally purchased by the City in 1927 and the land was dedicated as a city park in 1929. In the same year as the park dedication, a permanent cross was constructed at the mountaintop for the yearly Easter services. As noted above the park became the site of a WPA-era work project between 1936 and 1943. Based upon these facts, the period of significance for the potential historic landscape would appear to be 1885-1943, beginning with the forest planting and extending through to what appears to be the last major improvement project for the park.

In summary, the HRER identified and evaluated the urban forest at Mount Davidson as potentially eligible for listing on the California Register under Criteria 1 (Event) and 2 (Persons) as an ethnographic landscape and treated it as a historic urban forest or historic landscape. The fact that the forest has existed since approximately 1885 and has since taken on importance to the City and the local residents could also give it standing as a vernacular landscape.

According to NPS Preservation Brief 36, a historic vernacular landscape is “a landscape that evolved through use by the people whose activities or occupancy shaped that landscape. Through social or cultural attitudes of an individual, family or a community, the landscape reflects the physical, biological, and cultural character of those everyday lives. Function plays a significant role in vernacular landscapes. They can be a single property such as a farm or a collection of properties such as a district of historic farms along a river valley.” Several features or events could qualify

Mount Davidson as a vernacular landscape: (1) the citizens' campaign to preserve Mount Davidson as a public park; (2) the site's home to the 1934 Mount Davidson Cross and the annual Easter sunrise service (that began in 1923); (3) the use of the Park as a place for recreation and contemplation; and (4) as a place that supports a rich biological community that would be enhanced through implementation of the SNRAMP. However, the essential function of Mount Davidson would not change with implementation of the SNRAMP. The cross would remain, the Easter services would be held, recreational activities would continue to be promoted, biological diversity would increase, the urban forest would be maintained according to SNRAMP principles and recommendations, and views of the site would not be materially altered. Further, if the site were classified as a vernacular landscape, it would be afforded no more or different protection than is offered by its classification as an ethnographic landscape or historic landscape or site.

Lastly, this site would likely not qualify as a designed landscape because there is insufficient evidence to demonstrate that it was consciously designed or laid out according to specific design principles or recognized landscape styles or traditions; however, the site's potential designation as a vernacular landscape is evaluated in this response.

Based on the above, invasive tree and vegetation removal would not result in a substantial adverse change in the significance of historic landscapes or historic forests and this impact would be *less than significant*.

Removal and Replacement of Trees

One of the commenters also indicated that "replacement trees can be planted anywhere in San Francisco," "SNRAMP specifies replacement of trees removed with oaks rather than the historic forest species," and "it lacks any plan for restoring the remaining forest in the MA-3a zone as the existing historic species reach the end of their lifespan." While the commenter is generally correct, there are some details that deserve clarification. First, trees would be replaced on a one-to-one basis within the Natural Areas, not within the broader city boundaries, although they would not necessarily be planted within the Natural Areas where trees were removed. Second, in addition to oaks, replacement trees in this Natural Area would also include cypress and berry-producing scrub, with cypress trees representing one of the species planted as part of the original Sutro forest; the tree selection, whether eucalyptus or a native species, would not make a meaningful difference in terms of the use of the park or its potential as a cultural landscape (using any of the three applicable definitions of a cultural landscape evaluated in the Draft EIR or in this response).

Plans for restoring the remaining forests in the MA-3a areas are, in fact, addressed in the SNRAMP under Issue GR-15 (Urban Forest) and Recommendations GR-15a through GR-15h, which call for maintaining a specific basal area per acre; maintaining a stocking rate that will perpetuate the urban forest and promote forest health as the forest ages; focusing on the removal of dead or dying trees, trees with disease or insect infestations, storm-damaged or hazardous trees, and trees that are suppressed because of overcrowding; not planting sensitive species; removing select invasive species to promote and maintain urban forest health; consulting the SFRPD arborist when tree removals or planting are proposed; installing trees and shrubs in the urban forests to promote species diversity and improve wildlife habitat; and using City-approved insecticides to treat cut stumps.

4.D.4 Transportation and Circulation [TR]

The comments and corresponding responses in this section cover topics in Draft EIR Section VI.F.1, Transportation and Circulation.

Comment TR-1 Impacts of driving if more dog play areas are closed

The response to Comment TR-1 addresses all or part of the following individual comments:

CFDG-1-07	CFDG-1-08	DogPACSF-1-13
Bartolotta-1-12	Brown-1-10	Chambers-1-04
Kelly-1-04	McGinnis-1-01	

- The EIR assumes that because there will still be relatively large off-leash areas in McLaren Park and on Bernal Hill, that few people will be forced to drive to other DPAs to walk their dogs, with few resulting impacts on air pollution, traffic congestion, and climate change from the added car trips after the 15% closures take place. However, this EIR does not adequately consider the topography of the remaining off-leash spaces in these parks. If much of the remaining area is steep, people will not be able to use the area, and more people will be forced to drive to other DPAs. This must be analyzed in this EIR. [CFDG-1-07]
- This EIR does not consider the impact of people driving to other parks if 80% of off-leash space is closed. This analysis must be done. [CFDG-1-08] [Kelly-1-04]
- The NAP EIR says that the impact of people driving to other parks to walk their dogs because of the closures of 15% of off-leash space at Lake Merced, Bernal Hill, and McLaren Park will be less than significant because there will remain sufficient off-leash space in those parks (except for Lake Merced). However, the EIR does not consider the impact of people driving to other parks if 80% of the legal off-leash space in city parks is eventually closed because NAP claims impacts from dogs. This must be included in the analysis of the Project Alternative, and will likely show a much more significant impact than what the EIR now shows. [DogPACSF-1-13] [Bartolotta-1-12] [Brown-1-10]
- The NAP EIR assumes that because there will still be relatively large off-leash areas in McLaren Park and on Bernal Hill, that few people will be forced to drive to other DPAs to walk their dogs, with few resulting impacts on air pollution, traffic congestion, and global warming from the added car trips after the 15% closures take place. However, the EIR does not adequately consider the topography of the remaining off-leash spaces in these parks. If much of the remaining area is steep, people will not be able to use the area, and more people will be forced to drive to other DPAs. This must be analyzed in the NAP EIR. The NAP EIR does not consider the impact of people driving to other parks if 80% of off-leash space is closed. This analysis must be done. [Chambers-1-04]
- Please do not close any off-leash parks unless scientific studies show that there are significant negative impacts, and don't forget to include the environmental impact created by forcing people to drive farther to get to a park. [McGinnis-1-01]

Response TR-1

These comments suggest that people would need to drive to other DPAs if the DPAs at Lake Merced, McLaren Park and Bernal Hill were closed or reduced in size.

As discussed in Draft EIR Section VI.F.1, Transportation and Circulation, the potential traffic effects from the proposed reductions and closures of DPAs would be less than significant. The DPAs at Bernal Hill and McLaren Park are proposed to be reduced, and not eliminated. As mentioned on Draft EIR p. 257, the portions of DPAs within McLaren Park and Bernal Hill that would be closed are steep areas with high erosion potential or areas with sensitive habitat. It is not anticipated that current users of these DPAs would need to access other DPAs with a resulting increase in vehicle trips. The DPA closure at Lake Merced could result in additional vehicle trips, but the increase is expected to be marginal due to low usage of this DPA along with the close proximity of two other existing off-leash areas for dogs (1.5 miles to Fort Funston and one-half mile to the Pine Lake DPA). The SFRPD conducted dog and owner counts at various DPA sites throughout the city (included as a new Appendix K to the Draft EIR and also provided in Chapter 5 of this RTC document on p. 5-69), and staff observed the Lake Merced DPA on three occasions. The total count from all three visits to the Lake Merced DPA was one dog and one owner; therefore, the closure of the Lake Merced DPA would not result in a substantial increase in vehicular traffic or vehicle miles traveled. Other than the reduction of the DPAs at Bernal Hill and McLaren Park and the closure of the Lake Merced DPA, no additional changes to DPAs are proposed at this time.

Also, some of the comments have varying interpretations of the percentage of DPAs that would be closed. As stated in Impact RE-1 (Draft EIR p. 257), of the 95.2 acres of off-leash DPAs within the City's Natural Areas, 19.3 acres (approximately 20 percent) are proposed for closure (SNRAMP General Recommendations GR-8a, GR-8b, and GR-8c) and 75.9 acres (approximately 80 percent) would remain available for off-leash use.

Refer to Response RE-7, RTC p. 4-323, for a discussion of the adequacy of the remaining DPA space at McLaren Park and Bernal Hill, and refer to Response RE-13, RTC p. 4-347 for a discussion of the effects of the reduction of off-leash Dog Play Areas (DPAs) on other DPAs in terms of recreational capacity.

Comment TR-2 Request Lake Merced Dog play area visitor use data to verify whether an increase in traffic would be minimal

The response to Comment TR-2 addresses all or part of the following individual comment:

NPS-1-09

- Lake Merced DPA (pg. 443): GGNRA would appreciate receiving any Lake Merced DPA visitor use data, referenced in the summary of increase in traffic being “minimal” as a result of this DPA closure. [NPS-1-09]

Response TR-2

This comment requests Lake Merced DPA visitor use data to verify whether an increase of traffic would be minimal in response to closure of this DPA. The response below provides the requested data to the extent possible.

The SFRPD collected visitor use data at their DPAs, including Lake Merced. Three visits were made to Lake Merced (on September 7, 2011, between 1:15 p.m. and 2:15 p.m., November 10, 2011, between 8:45 a.m. and 9:45 a.m., and November 11, 2011, between 7:45 a.m. and 8:15 a.m.). During the three visits, only one dog and one owner were observed on September 7, 2011; no dogs or owners were observed during the November visits. Further, no professional dog walkers were observed during any of the visits. Of all of the DPAs, Lake Merced exhibited the fewest dog-related visitor use (included as a new Appendix K to the Draft EIR and also provided in Chapter 5 of this RTC document on p. 5-69). The San Francisco Dog Owners Group⁶¹ indicated (on their website in 2009) that while this is an official DPA, it is barely used. The Group's website also states that it is risky to use with the nearby heavy, high-speed traffic, and it is not large enough for adequate off-leash play (San Francisco Dog Owners Group 2009).

Draft EIR p. 444 states that at Lake Merced, a designated five-acre DPA is located at the north side of the East Lake. This DPA would be closed as a result of the project. This closure may prompt users to access another DPA in the area. Fort Funston, located approximately 8,000 feet (about 1.5 miles) from the existing Lake Merced DPA, has approximately 200 acres open for off-leash dog use. Current users of the Lake Merced DPA could either walk or drive to the Fort Funston dog area. This could result in a slight increase in the number of vehicles along Lake Merced Boulevard. However, this increase would be minimal considering that the number of dog owners presently using this DPA is minor (San Francisco Dog Owners Group 2009). Also, dog owners could use the Pine Lake DPA, approximately half a mile north of Lake Merced. Therefore, the closure of the five-acre DPA would not significantly increase the number of vehicle trips in the vicinity. As such, reducing or reconfiguring the DPAs as part of this proposed project would not result in significant traffic impacts from increased vehicle trips.

⁶¹ According to the San Francisco Dog Owner's Group website, the purpose of the organization is as follows: "Founded in 1976 by a group of friends, SFDOG organized more formally in 1997 in reaction to the closing of Ocean Beach in the Golden Gate National Recreation Area to off-leash recreation. While continuing to work for off-leash recreational opportunities for responsible dog owners/guardians and their companion animals, we have expanded our mission to include a variety of programs designed to educate the people of San Francisco about dogs and their place in our culture. We work with dog owners/guardians about what it means to be a responsible dog owner/guardian. We help non-dog owners understand dog behavior to alleviate any fears or misconceptions they may have. We educate elected and appointed officials about dogs and the benefits of off-leash recreation. We share the 'joy of dog' with others, and provide a central clearinghouse of information about neighborhood dog groups, responsible dog ownership/guardianship, and off-leash recreation."

4.D.5 Noise [NO]

The comments and corresponding responses in this section cover topics in Draft EIR Chapter VI, Section VI.F.2, Noise.

Comment NO-1	Permanent noise impacts of tree removal
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The response to Comment NO-1 addresses all or part of the following individual comments:

MPIC-1-10

MPIC-2-22

- Noise and Wind Pollution Mitigation. The DEIR addresses the noise-pollution impact anticipated from the actual tree clearing to residents adjacent to the park. However, the DEIR does not address the MPIC's concern that tree removal will result in a substantial permanent increase in ambient noise levels heard by visitors within the park. The nearby 280 freeway, BART, and Portola Drive are substantial sources of noise currently partly mitigated by trees slated for removal. The Final EIR should compare sound readings within the MA-1a area with those in the MA-3a areas to demonstrate the impact of MA-1c and MA-2c area tree removal on noise levels along the Park road and trails surrounding the summit of the mountain. [MPIC-1-10]
- The forest in Mt. Davidson Park acts as a significant sound barrier. The DEIR addresses the noise-pollution impact anticipated from the actual tree clearing to residents adjacent to the park. However, the DEIR does not address the MPIC's concern that tree removal will result in a substantial, permanent increase in ambient noise levels heard by visitors **within the park**. The nearby 280 freeway, BART, and Portola Drive are substantial sources of noise currently partly mitigated by trees slated for removal. The final EIR should compare sound readings within the MA-1a area with those in the MA-3a areas to demonstrate the impact of MA-1c and MA-2c area tree removal on noise levels along the Park road and trails surrounding the summit of the mountain. [MPIC-2-22]

Response NO-1

These comments refer to the long-term noise impacts resulting from tree removal at Mount Davidson from within the park. For the reasons documented in Draft EIR Section VI.F.2, Noise, and as summarized below, the long-term noise effects on noise-sensitive receptors resulting from tree removal at Mount Davidson would be less than significant. The proposed tree removal activities would remove trees located in the middle of the forest and would leave intact at least 85 percent of the nonnative trees within that Natural Area. Although trees to be removed near Juanita Way are located in close proximity to residences, those trees are surrounded by a dense forest that extends more than 300 feet and tree removal would not affect the density or depth of this forest. As described in Draft EIR Chapter III, Project Description, p. 93, SFRPD would spread tree removal across targeted Natural Areas and would not concentrate it in a particular location at any one time.

The existing noise levels within the interior of the park, where most tree removal activities would be conducted, are generally below 55 dB L_{dn}.^{62, 63} According to the *San Francisco General Plan's* Land Use Compatibility Chart, noise levels below 70 dB L_{dn} are acceptable for parks and playgrounds.⁶⁴ Alterations to the forest canopy would not be sufficient to substantially increase permanent ambient noise levels within Mount Davidson, and would not result in unacceptable noise levels for park users. The comments above do not provide substantial evidence that the proposed project would result in significant noise impacts. In the absence of substantial evidence that the proposed project would result in a significant impact, the EIR properly concludes that long-term noise impacts on noise-sensitive receptors would be less than significant.

The text on Draft EIR p. 445 (first full paragraph) has been changed to address potential noise impacts from within the park, as follows:

Tree removal at Mount Davidson would be to the west and south of Juanita Way and would not increase the noise exposure of the residences along Juanita Way from Portola Drive. The existing noise levels within the interior of the park, where most tree removal activities would be conducted, are generally below 55 L_{dn}.^{65, 66} According to the *San Francisco General Plan's* Land Use Compatibility Chart, noise levels below 70 L_{dn} are acceptable for parks and playgrounds.⁶⁷ Alterations to the forest canopy would not be sufficient to substantially increase permanent ambient noise levels within Mount Davidson, and would not result in unacceptable noise levels for park users. Therefore, removal of the trees at Mount Davidson would not expose ~~the nearby residences noise sensitive receptors~~ to new, long-term noise sources.

⁶² Average noise exposure over a 24-hour period is often presented as a day-night average sound level (L_{dn}).

⁶³ San Francisco Planning Department, *San Francisco General Plan*, Environmental Protection Element, Map 1, Background Noise Levels. This document is available online at: www.sfplanning.org, accessed on January 18, 2013.

⁶⁴ San Francisco Planning Department, *San Francisco General Plan*, Environmental Protection Element. This document is available online at: www.sfplanning.org, accessed on January 18, 2013.

⁶⁵ Average noise exposure over a 24-hour period is often presented as a day-night average sound level (L_{dn}).

⁶⁶ San Francisco Planning Department, *San Francisco General Plan*, Environmental Protection Element, Map 1, Background Noise Levels. This document is available online at: www.sfplanning.org, accessed on January 18, 2013.

⁶⁷ San Francisco Planning Department, *San Francisco General Plan*, Environmental Protection Element. This document is available online at: www.sfplanning.org, accessed on January 18, 2013.

4.D.6 Air Quality [AQ]

The comments and corresponding responses in this section cover topics in Draft EIR Chapter V, Section V.K, Air Quality.

Comment AQ-1	Increased pollution from tree removal activities
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The response to Comment AQ-1 addresses all or part of the following individual comments:

SFFA-3-06

Bowman-2-12

Hecht-1-03

- The destruction of thousands of trees will increase air pollution

According to the US Forest Service survey of San Francisco's urban forest, "It is estimated that trees and shrubs [of San Francisco] remove 260 tons of air pollution (CO, NO₂, O₃, PM₁₀, 50₂) per year with an associated value of \$1.3 million (based on estimated national median externality costs associated with pollutants). **Trees remove about 19 percent more air pollution than shrubs in San Francisco.**" (emphasis added)

The DEIR provides us with no information about the increase in air pollution which will result from removing thousands of trees over 15 feet tall, untold numbers of trees less than 15 feet tall, thinning the remaining urban forest in the natural areas from approximately 740 trees per acre to less than 200 trees per acre and replacing all those trees with grassland and shrubs which are significantly less capable of reducing air pollution. [SFFA-3-06]

- In addition, trees benefit air quality and the plan does not address the impact of the removal of trees on air quality for those exercising or using the parks. The environmental impact on public health is significantly degraded by the SNRAMP proposed plan and the policies implemented by the Natural Areas Program since the creation of the SNRAMP. [Bowman-2-12]
- Another important consideration of the NAP "cleansing" program is the pollution it would create. How will the trees now growing, adding pleasant ambiance, softening the hard concrete be removed but with polluting equipment? How will the silent sequesters of carbon be transported once fallen but via polluting vehicles? And where will all the growing trees once felled go but to the already over-taxed landfill? [Hecht-1-03]

Response AQ-1

These comments note potential air quality (and greenhouse gas) impacts related to tree removal. Potential impacts related to criteria pollutant emissions generated by tree removal and hauling are evaluated under Impact AQ-4 (programmatic projects), Impact AQ-5 (routine maintenance), and Impact AQ-6 (Sharp Park restoration) in Draft EIR Section V.K, Air Quality. Potential health risk impacts from hazardous air pollutants generated by restoration activities, including tree removal and hauling are addressed in the Draft EIR under Impact AQ-7 (programmatic projects), Impact AQ-8 (routine maintenance), and Impact AQ-9 (Sharp Park restoration). Cumulative air quality and health risk impacts are addressed under Impact AQ-10. As discussed in the Draft EIR,

including under “Tree Removal and Replacement” of Draft EIR Chapter III, Project Description, pp. 92 and 93, implementation of the SNRAMP would employ manual techniques for tree removal wherever possible and would replace all trees removed from San Francisco Natural Areas. As analyzed in Draft EIR Section V.K, tree removal and other programmatic projects could exceed the 54 pounds per day NO_x significance threshold for construction activities. Since the details of the programmatic projects are not yet known, this is a conservative estimate of project specific impacts and the average daily emissions could be less. Given the uncertainty of actual construction required for the programmatic projects at this time and the resultant emissions, the Draft EIR concludes that NO_x emissions may remain above the significance threshold; therefore, even with implementation of Draft EIR Mitigation Measure M-AQ-4, Construction Contract Specification to Reduce Construction Vehicle Emissions, p. 431, potential air quality impacts were determined to be significant and unavoidable.

As described in Draft EIR Section VI.F.3, Greenhouse Gas Emissions, p. 445, all large woody debris would be used to create wildlife habitat, for erosion control, for trail maintenance or be composted in Golden Gate Park. As also stated on Draft EIR p. 453, wood chips may be used to suppress understory invasive vegetation or could be used as beneficial mulch on other revegetation projects in the Natural Areas. If onsite use is not available or realistic, the removed tree materials would be transported to SFRPD’s green waste/composting facility in Golden Gate Park or to Recology’s green waste site on Tunnel Road. Greenwaste generated at Sharp Park would be transferred to the Sharp Park organic dump. Where removal of tree materials is not possible, the limbs and trunk sections would be left in place on the ground. As stated on Draft EIR p. 93, Section III, Project Description, tree removal would leave the tree stump and root ball intact to hold the soil and minimize subsurface disturbance. Stumps may be ground to below grade where necessary to avoid tripping hazards and erosion impacts. As stated in Response GG-1, RTC p. 4-297, each year the Natural Areas Program propagates and plants over 10,000 plants in restoration sites throughout the city, approximately 200 of which are trees, and it is assumed that this practice will continue with implementation of the SNRAMP.

Appendix F of the SNRAMP indicates that “Mount Sutro has an estimated 740 trees per acre (including very small trees) and approximately 280 trees per acre over 12 inches.” However, the SNRAMP does not indicate that the Natural Areas, overall, contain approximately 740 trees per acre. Further, neither the SNRAMP (including Appendix F) or the Draft EIR states or implies that “thinning the remaining urban forest in the natural areas from approximately 740 trees per acre to less than 200 trees per acres and replacing all those trees with grassland and shrubs which are significantly less capable of reducing air pollution,” as the commenter suggests. The commenter did not provide additional data or information to describe how the presented calculations were obtained, and, therefore, no further response can be provided.

Vegetation sequestration of carbon is addressed on Draft EIR pp. 455 to 457, as well as Response GG-1, RTC p. 4-297. As discussed in this section, because the proposed project would

replace primarily dead, dying, and diseased trees that have limited capability to sequester carbon or other pollutants for that matter, with young saplings that have long-term carbon sequestration capabilities, the proposed project is expected to result in a net increase in carbon sequestration capacity within the Natural Areas in San Francisco. As discussed on Draft EIR p. 457, replacement of nonnative trees removed at Sharp Park with native grassland and scrub species would not result in a substantial loss of carbon sequestration capacity.

4.D.7 Greenhouse Gas Emissions [GG]

The comments and corresponding responses in this section cover topics in Draft EIR Chapter VI, Section VI.F.3, Greenhouse Gas Emissions.

Comment GG-1 Climate change analysis of vegetation changes is insufficient and inaccurate

The response to Comment GG-1 addresses all or part of the following individual comments:

DogPACSF-1-22	GGAS-1-09	MPIC-2-14
SFDOG-2-23	SFFA-3-05	WTPCC-1-03
Bartley-1-13	Bartolotta-1-21	Bose-1-04
Bose-1-05	Bowman-1-12	Brown-1-19
Hecht-1-02	Jake-1-10	Johns-1-06
Kelly-1-07	McAllister-3-03	Thomas-1-06

- 21) The NAP plans call for cutting down over 18,000 healthy trees simply because they are not native. The NAP EIR does not adequately consider the long-term impacts on climate change and global warming of the conversion of land covered by trees with grasslands. Tree are much better at carbon sequestration than grasslands, and the long-term consequences of this difference are not adequately considered. [DogPACSF-1-22] [SFDOG-2-23] [Bartolotta-1-21] [Brown-1-19]
- Golden Gate Audubon cautions the Planning Department that removal of trees results in loss of carbon and carbon-fixing, which may be considered to contribute to climate change. The Department should address this issue in the DEIR because failing to do so may be considered a flaw in the DEIR that leaves it vulnerable to challenge.

Golden Gate Audubon does not challenge the assertion that the DEIR is inconsistent with San Francisco's Climate Action Plan. (See DEIR, at 156). However, we note that the Project calls for the removal of many trees and other vegetation, which may have impacts on carbon-release and carbon-sequestration. Golden Gate Audubon urges the Planning Department to fully consider these impacts to ensure that the lack of information related to invasive plant removal and carbon-sequestration creates a vulnerable flaw in the DEIR. [GGAS-1-09]

- Implementation of SNRAMP will result in a significant loss of stored carbon.

The urban forest of San Francisco stores 196,000 tons of carbon and adds to that accumulated store of carbon at an annual rate of 5,200 tons per year, according to a US Forest Service

survey (Nowak 2007). About 25% of the annual rate of sequestration and the accumulated storage of carbon are accomplished by the blue gum eucalyptus, the chief target for destruction by SNRAMP. When a tree is destroyed, it releases the carbon that it has accumulated throughout its lifetime into the atmosphere as carbon dioxide (CO₂) as it decays. CO₂ is the predominant greenhouse gas that is causing climate change. Since greenhouse gases are regulated in California by a law that commits the state to reduce greenhouse gas emissions, the DEIR for the NAP goes to great lengths to make the case that destroying thousands of trees will not violate California law. The DEIR's claim that the implementation of SNRAMP will not contribute to greenhouse gas emissions is based on:

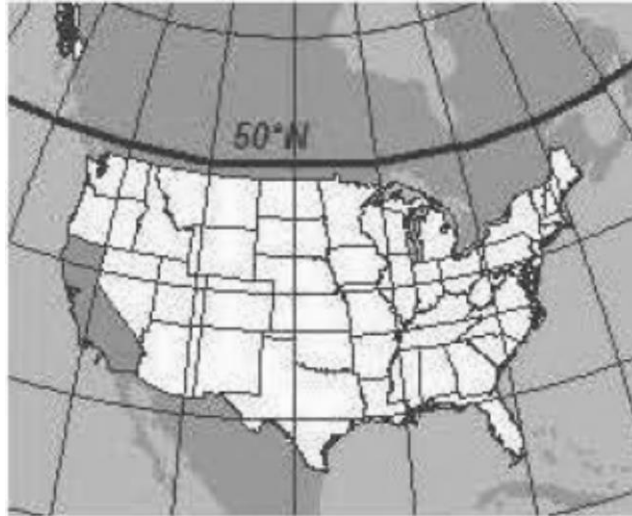
- > Fabricating facts by misrepresenting scientific studies. The facts are:
 - Grassland in San Francisco does NOT lower ground temperature.
 - Grassland does NOT store more carbon than forests.
- > Confusion of the RATE of carbon sequestration with the total accumulated carbon storage in the plant or tree as it continues to grow.
 - While a young tree may sequester carbon at a faster RATE while it is growing rapidly, as the DEIR maintains, that does not alter the fact that a mature tree stores more carbon over its lifetime as the carbon accumulates.
 - Replacing mature trees with ANY plant or tree will never compensate for the loss of the carbon stored in the trees that will be destroyed. Managing the forest by thinning and reforestation does NOT compensate for the loss of carbon stored in mature trees.

These misrepresentations and confusions are discussed in detail in the following subsections.

Grassland in the San Francisco Bay Area does NOT lower ground temperature.

The DEIR claims: "According to a study presented at the American Geophysical Union's meeting, **grasslands above 50 degrees' latitude** reflect more sun than forest canopies, thereby keeping temperatures lower by an average of 0.8 degree Celsius." (DEIR, page 457, citing Jha A, "Planting trees to save planet is pointless, say ecologists" in The Guardian, 12/15/2006). However, the DEIR's statement does not apply to the San Francisco Bay Area and the reference used to support the statement misrepresents the cited study, because:

- > The entire continental United States, including the San Francisco Bay Area, is below 50 degrees latitude. In other words, this statement – even if it were true – would not apply to the San Francisco Bay Area.



- > The statement is taken out of the context of the article. The entire sentence in which this statement appears actually says, “Grassland or **snowfields**, however, reflected more sun, keeping temperatures lower. Planting trees above 50 degrees latitude, such as in Siberia, could cover tundras normally blanketed in heat-reflecting snow.” It does not snow in the San Francisco Bay Area. Therefore, this statement does not apply to the San Francisco Bay Area.
- > The article being quoted by the DEIR is NOT the scientific study, but rather a journalistic article in *The Guardian*, a newspaper in England, in which the author of the study has been misquoted and his study misrepresented.
- > The day after this article appeared in *The Guardian* (and also in the *New York Times*), *The Guardian* published an op-ed (which also appeared in the *New York Times*) by the author of the scientific study, Ken Caldeira (Stanford University) in which he objected to the misrepresentation of his study:

“I was aghast to see our study reported under the headline “Planting trees to save planet is pointless, say ecologists.” (December 15). Indeed, our study found that **preserving and restoring tropical forests is doubly important**, as they cool the earth both by removing the greenhouse gas carbon dioxide from the atmosphere and by helping produce cooling clouds. We did find that preserving and restoring forests outside the tropics does little or nothing to help slow climate change, but nevertheless **these forests are a critical component of Earth’s biosphere and great urgency should be placed on preserving them.**” (Caldeira, 2006)

As if this misrepresentation of the facts weren’t bad enough, we find in Appendix A of the DEIR that this isn’t the first time that someone has informed the authors of the DEIR that their statement is not accurate. One of the public comments submitted in 2009 in response to the Initial Study quoted Ken Caldeira’s op-ed in the *New York Times*. Yet, 2 years later, the DEIR repeats this misrepresentation of Professor Caldeira’s research.

Grassland does NOT store more carbon than forests.

The DEIR also claims that “Research studies have concluded that grassland and scrub habitat could act as a significant carbon sink.” (DEIR, page 457, citing Conant, Paustian and Elliot, 2001 and Hu, et al, 2001).

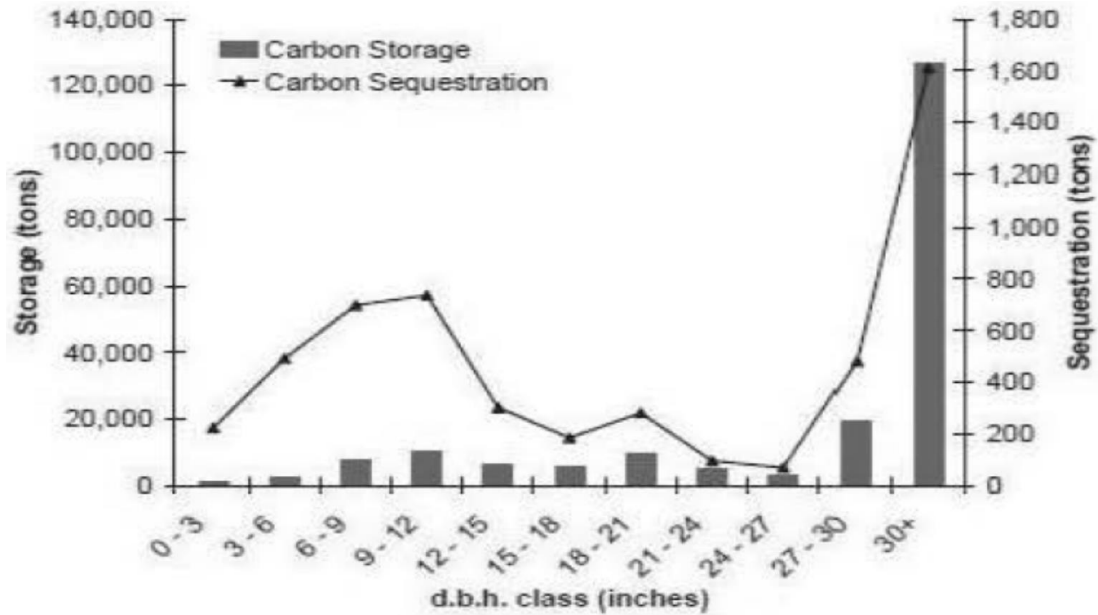
Once again, **the cited studies do not support the statement in the DEIR:**

- > The statement has been taken out of context. The entire sentence reads, “We conclude that grasslands can act as a significant carbon sink **with the implementation of improved management.**” This sentence appears in the abstract for the publication. (Conant 2001)
- > The point of the study is that land management techniques such as fertilization, irrigation, introduction of earthworms, plowing and fallow methods, etc., can improve the sequestration of carbon in the soil of croplands and pastures. This is obviously irrelevant to the Natural Areas Program, which is not engaged in agriculture or pasturage.
- > However, the study is relevant in that it reports that **when forest is converted to grassland, no amount of “management techniques” can compensate for the loss of the carbon in the trees that are destroyed:** “Though more than half of the rain forest conversion studies (60%) resulted in increased soil carbon content, **net ecosystem carbon balance...decreased substantially due to the loss of large amounts of biomass carbon.**” (Conant 2001)

The second study cited (Hu et al, 2001) in support of the claim about carbon storage in grassland reports that increased levels of carbon dioxide **in the air** increase carbon accumulation in the soil. This study says nothing about the relative merits of grasslands and forests with respect to carbon storage. Another study reports a relation between global warming and carbon storage in trees: “...warmer temperatures stimulate the gain of carbon stored in trees as woody tissue, partially offsetting the soil carbon loss to the atmosphere.” (Melillo, 2011)

The DEIR confuses the RATE of carbon sequestration with the total accumulated storage over the life of the tree.

The DEIR claims that because a young tree, growing at a faster rate than a mature tree, sequesters carbon at a faster rate than a mature tree, it follows that replacing mature trees with young trees will result in a net carbon benefit. This is NOT a logical conclusion, as illustrated by the following graph from the US Forest Service survey of San Francisco’s urban forest (Nowak, 2007):



This graph tells us that although trees sequester carbon faster when they are very small, the large, most mature trees are also sequestering carbon and they store far more carbon than the smaller trees. This is as we would expect, **because the total amount of carbon stored within the plant or tree is proportional to its biomass, both above ground (trunk, foliage, leaf litter, etc.) and below ground (roots).**

Even IF it were possible to replace the non-native trees with native trees—and it's NOT--the native trees would be significantly smaller than the trees that will be destroyed. The few trees that are native to San Francisco are ALL small trees, compared to the trees that will be destroyed. The Natural Areas Program reports that they have planted 8 species of native trees in the "natural areas" since 2008. Of those 8 species, only one (Red Alder) is classified as a tree by the USDA plant database. The other 7 species are classified as "tree/shrub," indicating their small stature and low branching habit. Since the amount of carbon stored within the tree is proportional to its biomass, the native trees would never sequester as much carbon as the trees that will be destroyed by the implementation of SNRAMP.

In its zeal to exonerate SNRAMP from releasing carbon stored in the trees it proposes to destroy, it contradicts itself, i.e., that SNRAMP proposes to destroy all non-native trees less than 15 tall. These are the very same young trees that the DEIR says are capable of sequestering more carbon than mature trees. If, indeed, carbon storage could be preserved by a forest of exclusively young trees—and it CAN'T—what is the point of destroying all the young non-native trees?

The DEIR does not account for the loss of the carbon in the trees that will be destroyed

If we were starting with bare ground, it might be relevant to compare carbon sequestration in various types of vegetation, but we're not. We're talking about a specific project which will require the destruction of thousands of non-native trees. Therefore, we must consider the loss of carbon associated with destroying those trees. **It doesn't matter what is planted**

after the destruction of those trees, nothing will compensate for that loss because of how the trees will be disposed of.

The fate of the wood in trees that are destroyed determines how much carbon is released into the atmosphere. For example, if the wood is used to build houses the loss of carbon is less than if the wood is allowed to decompose on the forest floor. And that is exactly what this project proposes to do: chip the wood from the trees and distribute it on the forest floor, also known as "mulching." **As the wood decomposes, the carbon stored in the wood is released into the atmosphere as carbon dioxide:** "Two common tree disposal/utilization scenarios were modeled: 1) mulching and 2) landfill. Although no mulch decomposition studies could be found, studies on decomposition of tree roots and twigs reveal that 50% of the carbon is lost within the first 3 years. The remaining carbon is estimated to be lost within 20 years of mulching. Belowground biomass was modeled to decompose at the same rate as mulch regardless of how the aboveground biomass was disposed" (Nowak 2002)

Furthermore, the process of removing trees releases stored carbon into the atmosphere, regardless of the fate of the destroyed trees: "Even in forests harvested for long-term storage wood, more than 50% of the harvested biomass is released to the atmosphere in a short period after harvest." (Anderson 2008)

The DEIR claims to have run a model of carbon loss resulting from the project in Sharp Park: "The model returns the CO2 emission rates for all equipment deliveries, and worker activity involving on-road and off-road gasoline and diesel fuel use." (DEIR, page 455). The CO2 emissions resulting from the destruction of 15,000 trees over 15 feet tall in Sharp Park is conspicuously absent from their analysis.

Managing the forest by thinning and reforestation does NOT compensate for the loss of carbon stored in the trees that will be removed.

The DEIR claims that improving the health of the urban forest by thinning and reforestation with young trees-which will NOT be physically possible--will result in a net benefit of carbon storage.

In fact, the more open canopy of an urban forest with less tree density results in greater growth rates. (EPA 2010) Although more rapid growth is associated with greater rates of carbon sequestration, rates of storage have little effect on the net carbon storage over the life of the tree. (Nowak 1993) **Net carbon storage over the life of the tree is determined by how long the species lives and how big the tree is at maturity. These characteristics are inherent in the species of tree and are little influenced by forest management practices such as thinning.** (Nowak 1993)

More importantly, even if there were some small increase in carbon storage of individual trees associated with thinning, this increase would be swamped by the loss of the carbon in the trees that will be destroyed. [MPIC-2-14] [SFFA-3-05]

Conclusion

The final EIR must correct the following errors of FACT in the DEIR:

- > The citations used to make bogus claims regarding carbon sequestration must be removed because they are not relevant and they have been misrepresented by the DEIR.
- > The DEIR's presentation of the terrestrial carbon cycle must be corrected because it is inaccurate:
 - o RATES of carbon sequestration must not be confused with the total accumulated stored carbon in mature trees.
 - o The final EIR cannot claim that there will be a net carbon benefit of the proposed tree destruction because that claim is inconsistent with the science of the terrestrial carbon cycle

The DEIR has not quantified the carbon stored in the current landscape; has not quantified the carbon released by the planned tree destruction; has not quantified the carbon stored in the resulting grassland and scrub. The claimed "qualitative analysis" does not tell us how much carbon will be released into the atmosphere by the implementation of SNRAMP. [SFFA-3-05]

As required by CEQA and California Law AB 32, the final EIR must quantify the loss of carbon resulting from the destruction of thousands of healthy trees, compare that loss to the resulting vegetation (grassland and scrub) and mitigate for the net loss of carbon that is the inevitable outcome of the implementation of SNRAMP. [MPIC-2-14] [SFFA-3-05]

- WTPCC is also concerned that the DEIR does not adequately address impacts on carbon sequestration and global warming from NAP's plans to cut down 18,500 trees. A 2007 US Forest Service survey of San Francisco's urban forest notes that our trees store 196,000 tons of carbon, adding 5,200 tons of carbon to the storage each year. When a tree is cut down, it releases its stored carbon into the atmosphere (as carbon dioxide) as it decays. California State Law requires the state to reduce greenhouse gas emissions; NAP's plans seem to be at odds with this goal. In addition, grassland does not store as much carbon as forests of trees, and the DEIR does not adequately address the impacts on this of NAP's plans to replace non-native trees with native grasses. [WTPCC-1-03]
- Carbon Sequester models - Trees vs. grasslands, etc.: If you completely buy into theories that our current climate change is primarily being driven by human impacts then methods of maximizing carbon sequestering by our planting (or un-planting) choices should be considered. Shapiro mentions trees vs. "artificial" grasslands (presume he means artificial turf) - well, that's a no-brainer but what about comparisons of natural grasslands (both non-native and native) vs. tree forests or even marshlands? There is disagreement amongst researchers on what habitat types sequester the most carbon and trees are not a clear front runner. [Bartley-1-13]

- Pg 457: The DEIR cites an irrelevant study showing that grasslands reflect more sunlight in northern latitudes above 50 degrees north. Since this does not apply to any part of the US but Alaska, it is misleading. [Bose-1-04]
- Pg 457: Grasslands as a significant carbon sink. Compared with what? The cited study compares badly managed agricultural land to better-managed pasture (with the single most important factor being fertilizer addition). Since the comparison here is with land covered with trees, the study is again irrelevant to this EIR. Cutting down trees and substituting grassland and scrub will inevitably reduce carbon sequestration. There has been no attempt to quantify the loss of sequestered carbon from the Proposed Project or any of the alternatives, though clearly with thousands of trees scheduled for destruction the impact would be considerable. [Bose-1-05]
- Air quality needs to be quantitatively reviewed for the removal of trees and limbs and for the suppression of replacement growth and underbrush instead of just presenting abstract information.

I cannot find a comprehensive analysis on carbon dioxide absorption from converting large areas of land from forest to grasslands/scrub. Cutting 18,500 trees is only a small part of the conversion since the actual goal is to slowly convert these areas to grassland/scrub. Just because the conversion is slow does not negate the fact that large area, particularly Sharp Park, will soon be almost devoid of trees and all the under canopy / vegetation that exists today. From what I can see, it appears that more 50% of the forest area is planned to be converted slowly to scrub and grassland just like what predominates most of San Mateo county and the nearby area. [Bowman-1-12]

- The Natural Areas Program's (NAP) plan would decimate our existing Urban Forest, including such a unique ecotope as Sutro Woods. The NAP plan relies on false thinking, is a waste of scarce resource, and is an aesthetic abomination. It is true as the plan's proponents state San Francisco once had no Urban Forest. But it is also true as proponents ignore that San Francisco once had no miles of roadways, concrete paving and buildings, an electrical grid and a dense population driving automobiles. The proponents of the plan never answer the question "What will sequester the off-gassing of these elements other than our Urban Forest's trees?" The answer is obvious to me and to others who work with sustainable landscaping: we need our existing trees to sustain the environment in which we live. Additionally, visit one of the many treeless San Francisco neighborhoods to understand the dismal, lifeless future of a treeless San Francisco. [Hecht-1-02]
- The NARMP plans call for cutting down almost 20,000 trees because they are not native does not adequately consider the long-term impacts on climate change, global warming, and the quality of fresh air in San Francisco. It would be costly and, simply, dumb. Open up your eyes! There are a lot of non-native inhabitants everywhere you look – in the Bay, on land, and in the air. Get used to it! [Jake-1-10]
- 4. And what about the climate change it will cause? Whole neighborhoods are buffered from the wind from the west because of the forests. [Johns-1-06]

- The NAP EIR does not adequately consider the long-term impacts on climate change and global warming that will result from changing areas with non-native trees into native grasslands. Trees are much better at sequestering carbon than grasslands are, and the long-term impact of cutting down trees and replacing them with grasslands must be considered. [Kelly-1-07]
- **3. The implementation of SNRAMP will result in a significant loss of stored carbon.**

The urban forest of San Francisco stores 196,000 tons of carbon and adds to that accumulated store of carbon at an annual rate of 5,200 tons per year according to the US Forest Service survey. (Nowak 2007) About 25% of the annual rate of sequestration and the accumulated storage of carbon are accomplished by the blue gum eucalyptus, the chief target for destruction by SNRAMP. When a tree is destroyed, it releases the carbon that it has accumulated throughout its lifetime into the atmosphere as Carbon Dioxide (CO₂) as it decays. Carbon Dioxide is the predominant greenhouse gas that is causing climate change.

Since greenhouse gases are regulated in California by a law that commits the state to reduce greenhouse gas emissions, the Draft Environmental Impact Report (DEIR) for the Natural Areas Program (NAP) goes to great lengths to make the case that destroying thousands of trees will not violate California law. The DEIR's claim that the implementation of SNRAMP will not contribute to greenhouse gas emissions is based on:

- > Fabricating facts by misrepresenting scientific studies. The facts are:
 - Grassland in San Francisco does NOT lower ground temperature
 - Grassland does NOT store more carbon than forests
- > The DEIR confuses the RATE of carbon sequestration with the total accumulated carbon storage in the plant or tree as it continues to grow. While a young tree may sequester carbon at a faster RATE while it is growing rapidly that does not alter the fact that a mature tree stores more carbon over its lifetime as the carbon accumulates.
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- > The day after this article appeared in The Guardian (and also in the New York Times), The Guardian published an op-ed (which also appeared in the New York Times) by the author of the scientific study, Ken Caldeira in which he objected to the misrepresentation of his study:

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As if this misrepresentation of the facts weren’t bad enough, we find in Appendix A of the DEIR that this isn’t the first time that someone has informed the authors of the DEIR that this statement is not accurate. One of the public comments submitted in 2009 in response to the Initial Study quotes Ken Caldeira’s op-ed in the New York Times. Yet, two years later, the DEIR persists in repeating this misrepresentation of Professor Caldeira’s (Stanford University) research.

Grassland does NOT store more carbon than forests

The DEIR also claims:

“Research studies have concluded that grassland and scrub habitat could act as a significant carbon sink.” (DEIR, page 457, cited studies)

Once again, the cited study does not support the statement in the EIR:

- > Again, the statement has been taken out of context. The entire sentence reads, “We conclude that grasslands can act as a significant carbon sink **with the implementation of improved management.**” This sentence appears in the abstract for the publication. (Conant 2001)

- > One wonders if the authors of the DEIR read the entire article or just the abstract. The point of the study is that land management techniques such as fertilization, irrigation, introduction of earthworms, plowing and fallow methods, etc., can improve the sequestration of carbon in the soil of croplands and pastures. This is obviously irrelevant to the Natural Areas Program, which is not engaged in agriculture or pasturage.
- > However, the study is relevant in one regard. It reports that **when forest is converted to grassland, no amount of “management techniques” compensates for the loss of the carbon in the trees that are destroyed:**

“Though more than half of the rain forest conversion studies (60%) resulted in increased soil Carbon content, **net ecosystem Carbon balance ... decreased substantially due to the loss of large amounts of biomass carbon.**” (Conant 2001)

The second study cited in support of the claim about carbon storage in grassland reports that increased levels of Carbon Dioxide in the air increases carbon accumulation in the soil. This study tells us nothing about the relative merits of grassland and forests with respect to carbon storage. (Hu 2001) Another study reports a similar relationship between global warming and carbon storage in trees: “... warmer temperatures stimulate the gain of carbon stored in trees as woody tissue, partially offsetting the soil carbon loss to the atmosphere.” (Melillo 2011)

The DEIR confuses the RATE of carbon sequestration with the total accumulated storage over the life of the tree

The DEIR claims that because a young tree, growing at a faster rate than a mature tree, sequesters carbon at a faster rate than a mature tree, it follows that replacing mature trees with young trees will result in a net carbon benefit. This is NOT a logical conclusion, as illustrated by this graph from the US Forest Service survey of San Francisco’s urban forest (Nowak 2007):

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Even IF it were possible replace the non-native trees with native trees – and it’s NOT – the native trees would be significantly smaller than the trees that will be destroyed. The few trees that are native to San Francisco are ALL small trees, compared to the trees that will be destroyed. Since the amount of carbon stored within the tree is proportional to its biomass, the native trees would never sequester as much carbon as the trees that will be destroyed by the implementation of SNRAMP.

In its zeal to exonerate SNRAMP from releasing carbon stored in the trees it proposes to destroy, it contradicts itself, i.e., that SNRAMP proposes to destroy all non-native trees less than 15 tall. These are the very same young trees that the DEIR says are capable of sequestering more carbon than mature trees. If, indeed, carbon storage could be preserved by

a forest of exclusively young trees – and it CAN'T – what is the point of destroying all the young non-native trees?

The DEIR does not account for the loss of the carbon in the trees that will be destroyed

If we were starting with bare ground, it might be relevant to compare carbon sequestration in various types of vegetation, but we're not. We're talking about a specific project which will require the destruction of thousands of nonnative trees. Therefore, we must consider the loss of carbon associated with destroying those trees. **It doesn't matter what is planted after the destruction of those trees, nothing will compensate for that loss because of how the trees will be disposed of.**

The fate of the wood in trees that are destroyed determines how much carbon is released into the atmosphere. For example, if the wood is used to build houses the loss of carbon is less than if the wood is allowed to decompose on the forest floor. And that is exactly what this project proposes to do: chip the wood from the trees and distribute it on the forest floor, also known as "mulching." **As the wood decomposes, the carbon stored in the wood is released into the atmosphere as carbon dioxide:** "Two common tree disposal/utilization scenarios were modeled: 1) mulching and 2) landfill. Although no mulch decomposition studies could be found, studies on decomposition of tree roots and twigs reveal that 50% of the carbon is lost within the first 3 years. The remaining carbon is estimated to be lost within 20 years of mulching. Belowground biomass was modeled to decompose at the same rate as mulch regardless of how the aboveground biomass was disposed" (Nowak 2002)

Furthermore, the process of removing trees releases stored carbon into the atmosphere, regardless of the fate of the destroyed trees: "Even in forests harvested for long-term storage wood, more than 50% of the harvested biomass is released to the atmosphere in a short period after harvest." (Anderson 2008)

The DEIR claims to have run a model of carbon loss resulting from the project in Sharp Park: "The model returns the CO2 emission rates for all equipment deliveries, and worker activity involving on-road and off-road gasoline and diesel fuel use." (DEIR, page 455). The CO2 emissions resulting from the destruction of 15,000 trees over 15 feet tall in Sharp Park is conspicuously absent from their analysis.

Managing the forest by thinning and reforestation does NOT compensate for the loss of carbon stored in the trees that will be removed.

The DEIR claims that improving the health of the urban forest by thinning and reforestation with young trees – which will NOT be physically possible--will result in a net benefit of carbon storage.

In fact, the more open canopy of an urban forest with less tree density results in greater growth rates. (EPA 2010) Although more rapid growth is associated with greater rates of carbon sequestration, rates of storage have little effect on the net carbon storage over the life of the tree. (Nowak 1993) **Net carbon storage over the life of the tree is determined by how long the species lives and how big the tree is at maturity. These characteristics are**

inherent in the species of tree and are little influenced by forest management practices such as thinning. (Nowak 1993)

More importantly, even if there were some small increase in carbon storage of individual trees associated with thinning, this increase would be swamped by the loss of the carbon in the trees that will be destroyed.

Conclusion

The final EIR must correct the following errors of FACT in the DEIR:

- > The citations used to make bogus claims regarding carbon sequestration must be removed because they are not relevant and they have been misrepresented by the DEIR.
- > The DEIR's presentation of the terrestrial carbon cycle must be corrected because it is inaccurate:
 - o RATES of carbon sequestration must not be confused with the total accumulated stored carbon in mature trees.
 - o The final EIR cannot claim that there will be a net carbon benefit of the proposed tree destruction because that claim is inconsistent with the science of the terrestrial carbon cycle

The DEIR has not quantified the carbon stored in the current landscape; has not quantified the carbon released by the planned tree destruction; has not quantified the carbon stored in the resulting grassland and scrub. The claimed "qualitative analysis" does not tell us how much carbon will be released into the atmosphere by the implementation of SNRAMP.

As required by CEQA and California Law AB 32, the final EIR must quantify the loss of carbon resulting from the destruction of thousands of healthy trees, compare that loss to the resulting vegetation (grassland and scrub) and mitigate for the net loss of carbon that is the inevitable outcome of the implementation of SNRAMP. [McAllister-3-03]

- Loss of trees would result in less sequestering of carbon dioxide and motor vehicle exhaust products, adversely affecting local air quality. [Thomas-1-06]

Response GG-1

These comments question whether the Draft EIR correctly analyzed the effects of the conversion of land covered by trees to grasslands (i.e., carbon storage and carbon sequestration as compared to loss of carbon) on climate change and global warming. These comments also indicate that there was no attempt to quantify the loss of sequestered carbon from the Proposed Project and questioned whether grasslands are a carbon sink. Additional analysis is provided below to further support the impact analysis and determinations of the Draft EIR with respect to the loss of GHG sequestration.

As discussed and evaluated in Draft EIR Section VI.F.3, Greenhouse Gas Emissions, "Vegetation Sequestration of Carbon" section, pp. 455 to 457, tree removal would be conducted to promote forest health and foster native species and would focus on removing trees that are dead, dying, diseased,

insect-infested, storm-damaged, or hazardous, or whose growth is suppressed by overcrowding. In addition, trees removed in San Francisco would be replaced at a one-to-one ratio. Carbon accumulated in biota will always be returned to the atmosphere upon death and decay of the plant or tree. Therefore, the release of biogenic GHG's resulting from the proposed project would eventually occur without the project. Consequently, when addressing the GHG impacts of a proposed project, it is standard practice in CEQA to assess the difference between existing sequestration rates and those that would occur after implementation of a proposed project. This practice is demonstrated by the California Emissions Estimator Model (CalEEMod) model of the California Air Pollution Control Officers Association (CAPCOA). This model is a tool developed with the consultation of CAPCOA for the purposes of calculating pollutant emissions and GHGs with respect to CEQA analysis. CalEEMod calculates GHG emissions based solely on sequestration rates and not based on release of stored carbon (ENVIRON 2013).

The text on Draft EIR pp. 456 to 457 (starting with the last paragraph) has been changed to further substantiate and quantify the impact assessment of the Draft EIR, as follows:

~~As trees die and decay, they release much of the stored carbon to the atmosphere. Thus, carbon storage is an indication of the amount of carbon that can be lost if trees are allowed to die and decompose. Of all the species in San Francisco, eucalyptus trees store and sequester the most carbon (approximately 24.4 percent of the total carbon stored and 16.3 percent of all sequestered carbon). Trees removed in the Natural Areas in San Francisco would be replaced at a one-to-one ratio, although not necessarily in the same location. Eucalyptus trees would be replaced with native trees. Although the net effect on carbon sequestration capacity is unknown for the proposed replacement of mature eucalyptus with native saplings, replacing dying trees with healthy trees typically enhances the carbon sequestration process. In fact, one of the urban forest management strategies to help improve air quality is to increase the number of healthy trees. Further, among mitigation measures recommended by the Intergovernmental Panel on Climate Change is forest management, and particularly selection of tree species that sequester the most carbon (IPCC 2007). As such, tree replacement is expected to result in a net increase in the amount of carbon sequestered within the Natural Areas. The total number of trees would not change within the Natural Areas of San Francisco and the amount of carbon sequestered would increase in the long term from replacing dead, dying, or diseased trees. According to the California Registry, dead trees must be replaced within one year of removal. This timeframe allows for planting to occur at the appropriate time of the year. Therefore, the project would not conflict with San Francisco's Greenhouse Gas Ordinance. Further, the project would not conflict with California's goal of reducing GHG emissions set forth by the timetable established in AB32⁶⁸. Therefore, the proposed project would result in less than significant individual and cumulative impacts from GHG emissions and the associated carbon sequestration impacts. An analysis drawing from a number of resources to quantify anticipated CO₂ sequestration gains and losses was prepared for the SNRAMP Project. These sources include the Urban Forestry Carbon Sequestration Workbook~~

⁶⁸ In 2006, the California legislature passed Assembly Bill No. 32 (California Health and Safety Code Division 25.5, Sections 38500, et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 requires ARB to design and implement emission limits, regulations, and other measures, such that feasible and cost effective statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions).

published by the U.S. Department of Energy,⁶⁹ the Center for Urban Forest Research Tree Carbon Calculator published by the U.S. Forest Service (USFS),⁷⁰ the *Good Practice Guidance for Land Use, Land Use Change and Forestry* published by the International Panel on Climate Change (IPCC),⁷¹ and the CalEEMod supporting calculations.⁷²

Trees have a relatively high rate of CO₂ sequestration potential. However, while the sequestration rate increases over a period of time (assumed to be approximately 20 years, based on professional practice), after that point the accumulation of carbon in biomass slows with age, and eventually is completely offset by losses associated with tree clipping, pruning, and occasional death (IPCC 2003). Sequestration rates for grasslands and herbaceous plants, which grow quickly, were assumed to be static. This analysis applied tree age for Blue Gum (eucalyptus trees would be the predominant species removed, and all are assumed to be blue gum) provided by the SFRPD to determine increases and losses in CO₂. The Urban Forestry Carbon Sequestration Workbook was used to estimate increasing carbon sequestration of new tree plantings over a 20-year period. The Tree Carbon Calculator from the USFS was used as a source of sequestration rates for specific tree types to be removed as provided by the SFRPD.⁷³ The CalEEMod supporting documentation provided the sequestration rates for grasslands.

The following discussion shows sequestration losses and gains from implementation of two distinct activities: (1) implementation of a tree replacement program in San Francisco (Table 19A); and (2) replacing existing trees with native grasses in Sharp Park in Pacifica (Table 19B).

While these tables represent distinct activities, the total project beneficial impact would be the sum of these two contributions, which shows a net sequestration gain at the end of the 20-year program of 202 metric tons of CO₂e per year (calculated as 138 metric tons of CO₂e per year [Table 19A] plus 64 metric tons of CO₂e per year [Table 19B]).

Sequestration Losses and Gains from Tree Replacement in San Francisco

Data provided indicate that 3,448 trees would be removed from the Natural Areas in San Francisco (not including Sharp Park) over a 20-year period. While six species of trees were identified for removal, species-specific sequestration rates could not be identified for four of these species. However, the remaining two species (eucalyptus and pine) comprise over 96 percent of the trees to be removed. Consequently, sequestration rates for the remaining species were assigned to the known sequestration rates equally. Based on field data estimates provided by Hort Science,⁷⁴ approximately 2,942 of these trees to be removed are Blue Gum trees greater than 20 years of age for which sequestration has been slowed and is assumed by IPCC Good Practice⁷⁵ to be offset by

⁶⁹ U.S. Department of Energy, Urban Forestry Carbon Sequestration Workbook, 2007.

⁷⁰ U.S. Forest Service, Urban Forest Research Tree Carbon Calculator, 2005. This document is available online at: <http://www.fs.usda.gov/ccrc/tools/tree-carbon-calculator-ctcc>, accessed on June 7, 2016.

⁷¹ International Panel on Climate Control, National greenhouse Gas Inventories Programme, *Good Practice Guidance for Land Use, Land Use Change and Forestry*, 2003. This document is available online at: http://www.ipcc-nggip.iges.or.jp/public/gpplulucf/gpplulucf_files/GPG_LULUCF_FULL.pdf, accessed on June 7, 2016.

⁷² SCAQMD, CalEEMod Appendix A, 2011.

⁷³ San Francisco Recreation and Park Department, Memorandum to Jessica Range of San Francisco Environmental Planning, November 27, 2012.

⁷⁴ Hort Science, Memorandum to Jessica Range, January 17, 2013.

⁷⁵ International Panel on Climate Control, National greenhouse Gas Inventories Programme, *Good Practice Guidance for Land Use, Land Use Change and Forestry*, 2003.

maintenance and mortality. Loss of sequestration from trees to be removed in San Francisco is presented in Table 19A.

Over the same 20-year period that trees would be removed, new tree plantings would occur. These trees were assumed, based on data provided, to largely consist of California Live Oak. Consequently, these trees were assigned to the “medium hardwood” category in the Urban Forestry Carbon Sequestration Workbook. Carbon sequestration increases over time from replanting 3,448 trees are also presented in Table 19A.

Table 19A
CO₂ Sequestration Losses and Gains from Tree Removal and Planting in San Francisco

<u>Tree Removal – San Francisco</u>	<u>Estimated CO₂ Losses (-) and Gains (+)</u>
<u>Annual sequestration loss (over 20 years)</u>	<u>- 54 Metric Tons (MT) CO₂/year</u>
<u>Tree Plantings – San Francisco</u>	<u>Estimated CO₂ Losses (-) and Gains (+)</u>
<u>Annual sequestration gain (year 20)</u>	<u>+ 192 MT CO₂/year</u>
<u>Net sequestration gain at end of 20-year program</u>	<u>+ 138 MT CO₂/year</u>

Sequestration Losses and Gains from Tree Removal and Grassland and Scrub placement in Sharp Park

Data provided indicate that 15,000 trees would be removed in Sharp Park (separate from the 3,448 removed in the San Francisco Natural Areas) over a 20-year period. These tree species are almost entirely eucalyptus. Based on field data estimates provided by Hort Science,⁷⁶ approximately 13,500 of these trees to be removed are Blue Gum trees greater than 20 years of age for which sequestration has been slowed and is assumed by IPCC Good Practice to be offset by maintenance and mortality. Loss of sequestration from trees to be removed at Sharp Park is presented in Table 19B.

Over the same 20-year period that trees would be removed from Sharp Park, trees would be replaced with native grassland and coastal scrub. Replacement vegetation was assigned a grassland sequestration rate as provided by CalEEMod. A specific sequestration rate for coastal scrub was not available; thus, all 56 acres of replaced vegetation were assumed to be grassland for purposes of calculation. Carbon sequestration associated with planting approximately 56 acres of grasslands is also presented in Table 19B.

⁷⁶ Hort Science, Memorandum to Jessica Range, January 17, 2013.

Table 19B
CO₂ Sequestration Losses and Gains from Tree Removal and
Grassland Planting in Sharp Park (in Pacifica)

<u>Tree Removal – Sharp Park</u>	<u>Estimated CO₂ Losses (-) and Gains (+)</u>
Annual sequestration loss (over 20 years)	- 177 MT CO ₂ /year
<u>Grassland Plantings – Sharp Park</u>	<u>Estimated CO₂ Losses (-) and Gains (+)</u>
Annual sequestration gain (year 20)	+ 241 MT CO ₂ /year
Net sequestration gain (after 20 years)	+ 64 MT CO₂/year

Net Sequestration Changes Associated with the Implementation of the SNRAMP

At the end of the 20-year horizon window of the SNRAMP, there would be a calculated total net sequestration gain of approximately 202 MT of CO₂ per year, as indicated in Tables 19A and 19B. The primary contributing factor to this sequestration gain would be the removal of an aging eucalyptus tree population which would be replaced with much more efficiently sequestering tree and plant growth.

~~Trees removed in Sharp Park would be replaced with native grassland and scrub species. The California Registry is developing flexible mechanisms to address reversals if removed trees are not compensated by planting replacement trees. According to a study presented at the American Geophysical Union's meeting, grasslands above 50 degrees latitude reflect more sun than forest canopies, thereby keeping temperatures lower by an average of 0.8 degree Celsius (Jha 2006). However, in the tropics, forests cool the planet by an average of 0.7 degree Celsius (Jha 2006). Research studies have concluded that grassland and scrub habitat could act as a significant carbon sink (Hu et al. 2001; Conant et al. 2001). Therefore, replacing the trees to be removed in Sharp Park with grassland and scrub habitat would not result in a substantial increase in GHG emissions from the loss of CO₂ sequestration, and impacts from GHG emissions would be less than significant.~~

Consequently, using standard practice methodologies for assessing GHG impacts relative to CEQA, the proposed project would have a net GHG benefit and would not conflict with California's goal of reducing GHG emissions set forth by the timetable established in AB 32.⁷⁷ Therefore, the proposed project would result in less than significant individual and cumulative impacts from GHG emissions and the associated carbon sequestration impacts.

In summary, sequestration rate estimates of newly planted grasslands are predicted to be greater than for the aging population of eucalyptus in Sharp Park based on factors published by the U.S. Department of Energy and the CAPCOA.

In addition, the text on Draft EIR p. 455 (starting on line 11) has been changed to address GHG emissions resulting from increased heavy-duty vehicle use associated with construction activities, as follows:

⁷⁷ In 2006, the California legislature passed Assembly Bill No. 32 (California Health and Safety Code Division 25.5, Sections 38500 et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 requires ARB to design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions).

Increased GHG emissions occur as a result of increased heavy-duty vehicle and equipment associated with construction activities. During the 5.5-month construction period, the Sharp Park wetland restoration project would emit 21,777 lbs per day of CO₂e, which is equivalent to a total of 1,630 metric tons of CO₂e. ~~Because BAAQMD's 2011 CEQA Air Quality Guidelines do not define a project-level GHG threshold for construction-related emissions, there is no applicable significance threshold to which to compare this estimate~~ but these emissions are commonly addressed in a CEQA analysis by amortizing them over the lifetime of a project and adding them to operational emissions. Using the 20-year window of the Management Plan as the lifetime of the proposed project, annualized emissions from construction would be approximately 81.5 metric tons of CO₂e per year.⁷⁸ When these emissions are added to those of the sequestration change, the proposed project would still have a less-than-significant impact with regard to GHG emissions. Thus, GHG emissions of the Sharp Park restoration would result in a less than significant impact. When the annual 81.5 metric tons of CO₂ emissions from construction are subtracted from the net sequestration gain resulting from the tree plantings with the project (202 MT of CO₂ per year), the project still results in a net sequestration gain. The Sharp Park restoration is considered the largest of the programmatic projects. Therefore, GHG emissions resulting from other individual programmatic projects in the Sharp Park Natural Area are expected to be less than those resulting from the restoration project.

Comment GG-2	Draft EIR ignores changes to San Francisco's climate
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The response to Comment GG-2 addresses all or part of the following individual comments:

DogPACSF-1-23

SFDOG-2-24

Bartolotta-1-22

Brown-1-20

Jake-1-11

Kelly-1-08

- The NAP EIR does not adequately consider the fact that the climate in San Francisco has changed (and continues to change) from the time several hundred years ago that the NAP plan is trying to re-create. Native plants suited to the earlier climate may no longer be suited to today's (and tomorrow's) climate. The NAP EIR does not consider the lack of sustainability of trying to re-create what the habitat was at one snapshot in time when the climate has changed since that time. The environmental consequences (for example, more

⁷⁸ The proposed activities for the Sharp Park restoration include the use of heavy equipment for creating shallow pools within the existing wetlands, dredging excess sediments, and grading to prevent flooding. GHG emissions resulting from the Sharp Park restoration were calculated using URBEMIS. The URBEMIS model was populated with assumptions regarding timing of restoration activities and the number, type, and operating hours of equipment as specified by the project sponsor. The model returns the CO₂ emission rates for all equipment, deliveries, and worker activity involving on-road and off-road gasoline and diesel fuel use. Other GHGs, such as methane and nitrous oxide rates, are assumed to comprise 95 percent of CO₂e emissions. In addition, this analysis assumed that all heavy duty construction equipment is diesel or gasoline powered and no substantial electrically powered pieces of construction equipment would be used, based on the project description. The results indicate that approximately 21,777 pounds per day of CO₂e would be emitted during the implementation of these activities. During the 5.5-month construction period, the Sharp Park wetland restoration project would emit 21,777 lbs per day of CO₂e, which is equivalent to a total of 1,630 metric tons of CO₂e. These emissions were annualized over the 20 year implementation period of the SNRAMP to come up with 81.5 metric tons of CO₂e per year, calculated as 1,630 metric tons of CO₂e divided by 20 years.

herbicides, etc.) of trying to force the old habitat into today's climate should be analyzed more thoroughly. [DogPACSF-1-23]

- The NAP EIR does not adequately consider the fact that the climate in San Francisco has changed (and continues to change) from the time several hundred years ago that the NAP plan is trying to re-create. Native plants suited to the earlier climate may no longer be suited to today's (nor tomorrow's) climate. The NAP EIR does not consider the lack of sustainability of trying to re-create what the habitat was at one snapshot in time considering that the climate has changed since that time, and will be continuing to change in the near future. The environmental consequences (for example, more herbicides, etc.) of trying to force the old habitat into today's (and tomorrow's) climate should be analyzed more thoroughly. [SFDOG-2-24] [Bartolotta-1-22] [Brown-1-20] [Kelly-1-08]
- The NARMP EIR does not adequately consider the fact that the climate in San Francisco has changed (and continues to change) from the time several hundred years ago that the NARMP plan is trying to re-create. [Jake-1-11]

Response GG-2

These comments assert that the Draft EIR did not adequately consider the fact that the climate in San Francisco has changed (and continues to change) as compared to hundreds of years ago.

The baseline for the CEQA analysis in the Draft EIR is the date issuance of the Notice of Preparation, April 2009. Atmospheric temperatures in the San Francisco Bay Area are predicted to increase by approximately 1.5 degrees Celsius between 2000 and 2050.⁷⁹ This increase in temperature over a 50-year period may discourage growth of certain sensitive plant and tree populations. During the same period, precipitation in the San Francisco Bay Area is predicted to be variable, with increased periods of drought.⁸⁰ As discussed in Draft EIR Chapter III, Project Description, the SNRAMP would maintain viable plant communities that consist of native species more adapted to local climate, such as those that are more drought-resistant and require less irrigation. It would, therefore, be more reasonable to allow native species to continue to evolve to these predicted slow increases in temperature and periods of drought than to predict what nonnative species may thrive under similar conditions. Refer also to Response HZ-4, RTC p. 4-557, for a discussion of the relative flammability of native and nonnative plants.

As discussed in Draft EIR Chapter III, Project Description, the SNRAMP aims to maintain viable plant communities. The SFRPD does not propose to introduce plants that are not viable in today's

⁷⁹ California Energy Commission, *White Paper on Climate Change Scenarios for the San Francisco Region*, July 2012. This document is available online at: <http://www.energy.ca.gov/2012publications/CEC-500-2012-042/CEC-500-2012-042.pdf>, accessed on June 7, 2016.

⁸⁰ California Energy Commission, *White Paper on Climate Change Scenarios for the San Francisco Region*, July 2012. This document is available online at: <http://www.energy.ca.gov/2012publications/CEC-500-2012-042/CEC-500-2012-042.pdf>, accessed on June 7, 2016.

climate. The proposed project includes both monitoring and adaptive management, which will allow the SFRPD to modify its activities based on the monitoring of project successes and failures. Further, refer to Response PD-11, RTC p. 4-159, for a discussion of the City's policy guidance that supports the protection and maintenance of biodiversity within the City's Natural Areas.

Refer also to Response HZ-1, RTC p. 4-531 for a discussion of the use of herbicides and pesticides with the Natural Areas, and Response BI-33, RTC p. 4-457, and Response PD-31, RTC p. 4-206, for a discussion of the success of past restoration and revegetation efforts and the measures that will be employed to ensure the success of future restoration and revegetation efforts.

4.D.8 Wind and Shadow [WS]

The comments and corresponding responses in this section cover topics in Draft EIR Chapter V, Section V.E, Wind and Shadow.

Comment WS-1	Analysis of wind impacts from tree removal
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The response to Comment WS-1 addresses all or part of the following individual comments:

MPIC-1-11	MPIC-2-08	SFFA-3-03
Bowman-2-03	Risk-1-04	Zeiger-1-02

- Furthermore, the trees in the MA-1c area now serve as a wind-break, and we believe their removal will significantly increase wind in inside the park and thus negatively impact the experience for visitors within the Park. The EIR should address this potential impact, which could be documented by taking wind speed-readings from the now treeless northeast viewpoint of the Park and comparing these readings with other readings from the MA-3a areas. [MPIC-1-11]

- **I. Wind**

The forest in Mt. Davidson Park is a significant wind barrier. The SNRAMP project disregards this fact in its proposed doubling of the existing native plant area of the park by converting a third of the forest area (10.2 acres) into a prairie/coastal scrub landscape. The DEIR statements that this is thinning the forest and would involve removal of only 15% of all the trees are misleading, as the trees are actually proposed for removal in a concentrated 10.2-acre area (p. 14, SNRAMP – Appendix F). The DEIR therefore does not adequately evaluate the potential damage to the remaining forest from windthrow after implementation of the 1000-tree removal planned for the MA-1c area. This concentrated removal, estimated by the SNRAMP to be 82% of the trees in this 3.5-acre area, is substantial – not mere thinning.

The DEIR concludes that the wind impacts would be less than significant because trees would be removed in accordance with the Urban Forestry Statements in Appendix F of the SNRAMP. This is an inaccurate conclusion because it does not address the statement in Appendix F that substantial tree removal should not occur in the MA-1c and MA-2c areas

because this would increase the rate of windthrow. The DEIR states that ground-level wind hazards would not increase along the trails of Mt. Davidson because mostly small- and medium-sized trees would be selectively removed. This is incorrect. The MA-1c zone, which will lose 82% of its trees, is the location of the major and most popular trails in the park, which cross this zone in several locations. This concentrated removal would therefore result in a significant negative impact to this cultural, recreational, and biological resource.

The EIR should acknowledge the above inconsistency in the SNRAMPS by recommending a significant reduction in the percentage of trees to be removed in the MA-1c area, to 15% or less, in order to avoid an increase in windthrow that could damage or kill trees, as well as expose trails and hikers to a significant increase in wind hazard created by making this area an exposed hilltop. In the existing situation, the forest serves as a wind-break and provides protection to visitors from the high wind speeds that prevail in this area. The EIR should address this potential cumulative negative impact, which could be documented by taking wind-speed readings from the now treeless northeast viewpoint of the Park and comparing these readings with other readings in the MA-1c zone, which would lose 82% of its trees. [MPIC-2-08]

- **The final EIR must provide scientific evidence that the trees that will be destroyed by SNRAMPS are invasive or it must delete this justification for their destruction.**

4. Tree removals will change wind patterns, causing tree failures

The DEIR does not evaluate wind impacts of removing thousands of trees in the natural areas because:

“This section does not address wind impacts in certain Natural Areas because trees targeted for removal are isolated individuals or small groups scattered throughout these Natural Areas, and this removal is not expected to have noticeable wind effects.” (DEIR, page 243)

It is patently false that “trees targeted for removal are isolated individuals or small groups scattered throughout” the natural areas. Here are a few examples of the large number of trees that will be removed from small areas (SNRAMPS, Forestry Statement, Appendix F-14-F-17):

- > Mt. Davidson: 1,000 trees will be removed from MA-1e (3.5 acres)
- > Glen Canyon: 100 trees will be removed from MA-2e (.6 acres)
- > Sharp Park: 1,476 trees will be removed from MA-2j (5.6 acres)
- > Corona Heights: 10 trees will be removed from MA2C (less than .01acre)
- > Bayview Park: 140 trees will be removed from MA-1d (.02 acres)
- > McLaren Park: 600 trees will be removed from MA-2b (9.9 acres)
- > Interior Greenbelt: 100 trees will be removed from MA-2a (1acre)

Tree removal on this scale cannot be done piecemeal, taking only a few individual trees on separate occasions. The game of “pick-up-sticks” is a good metaphor to understand the

problem. Felling one tree will impact those in close proximity. Whether intended or not, neighboring trees are likely to be felled by the falling tree.

Removing that individual tree will not be possible unless its neighbors are also removed. One can't pick up that felled tree when other standing trees surround it. Felled trees must be dragged out. As a qualified arborist said, when expressing his opinion of the proposed selective method of tree removal, "I don't have tweezers to pick these trees out of the forest."

Leaving the felled trees on the ground until they are all destroyed is not an option because the restoration objective is to plant the bared ground with native plants, which can't be accomplished if the ground is covered with dead trees.

Furthermore, destroying a large number of trees slowly, over time substantially increases the cost of such tree removals. Even if it were physically possible to remove them piecemeal, it would not be a responsible use of the limited resources of the Recreation & Park Department which frequently justifies the poor quality of its service and the maintenance of San Francisco's parks on the grounds that their budget is insufficient.

Even if it were true that only "small groups of trees" will be removed, it does not follow that tree removal would not include wind-toughened edge trees nor that removals "would not result in increased wind hazards or expose trees ... to high winds." In fact, most of the tree removals will occur on the edge of the existing forest, which is consistent with the stated goal of the removals to expand the adjacent native scrub and grassland (SNRAMP, Forestry Statement, pages F-8-F-11):

- > Mt. Davidson: "Additional removals will occur ... on the eastern edge of the forest."
- > Bayview Park: "Tree removal will focus on the existing edge of forests ..."
- > McLaren Park: "... removal will occur along forest edges ..."
- > Interior Greenbelt: "Tree removal will focus on the eastern border and the western tip of this Natural Area ..."

In addition to these narrative descriptions of the location of tree removals, SNRAMP contains detailed maps of the natural areas in Section 6 that indicate the location of the tree removals. These maps reveal the vulnerability of the remaining trees as a consequence of some of the tree removals.

In their "Assessment of Urban Forestry Operations" for the Recreation and Park Department, Hart Science reminds us of the vulnerability of the trees that remain after their neighbors are gone and they are exposed to more wind than they have developed defenses against: "As individual trees die or fall, it exposes remaining trees to higher wind loads and increases the overall failure rate." (page 27)

In December 2011, Hart Science provided us with a specific example of such an occurrence in their "Stern Grove-Pine Lake Park, Parkside Square tree risk assessment." This report was written as an update of Hart Science's comprehensive assessment of all trees in Stern Grove-Pine Lake in 2003, in preparation for finally removing the hundreds of trees that had been

evaluated as hazardous 8 years before. Here is what Hart Science found at the “West end of the park, near Wawona and 33rd Ave:”

“This area had a number of trees removed by the Natural Areas Program. Subsequently a large Monterey pine failed at the edge of the newly exposed woodland. Concern was expressed about the exposed nature of the edge and potential for additional failures. This area of Pine Lake Park is exposed to westerly winds. There is still, however, significant tree canopy at street-edge. Pines have been declining for some time. Tree #1057 is posted for removal. Mid-slope is a standing dead pine #347, also recommended for removal.”

These trees were cut down in order to expand the native plant garden around Pine Lake. Hart Science had evaluated all trees in Stern Grove/Pine Lake for hazards about one year before these trees were removed. We know those trees were not hazardous, because they had not been judged to be hazardous by the Hart Science evaluation done in 2003.

In other words, as a result of trees removed at the west end of Stern Grove by the Natural Areas Program, a large Monterey pine fell across the path around the lake. Hart Science doesn’t mention where the tree fell, but park visitors remember this failure well. It was not a tree that had been previously designated by Hart Science as hazardous. It became hazardous because its wind break was compromised by the removal of trees by the Natural Areas Program.

The removal of 1,600 trees over 15 feet tall on Mt. Davidson will substantially increase windthrow hazards. Although the DEIR denies this risk, the Forestry Statement in SNRAMP acknowledges it:

“Because of this, removal of edge trees on the northwest side of the park (MA-1e and MA-2c) could increase the rate of windthrow within the stand. **Substantial tree removal in these areas should not occur.** A significant number of mature trees should remain at the park edge to minimize the effects of wind on this stand.” (SNRAMP, Appendix F, page F-11)

Despite this warning that “substantial tree removal ... should not occur” in MA-1e and MA-2c areas, just three pages later in Table F-1, SNRAMP reports these tree removals in these areas on Mt. Davidson:

<i>MA</i>	<i>Acres</i>	<i>Existing Trees</i>	<i>Removed</i>	<i>Percent</i>
MA-1e	3.5	1221	1000	82%
MA-2c	1.8	644	200	31%

In other words, SNRAMP predicts tree failures on Mt. Davidson from removal of as many as 82% of all trees on 3.5 acres on the northwest side of Mt. Davidson, yet it plans to remove 1,200 trees from those areas anyway.

The Forestry Statement of SNRAMP also attempts to minimize the danger of windthrow on the grounds that the trees are not near residential neighborhoods: “In general, potential

windthrow hazard to people is minimal because there are no residential areas near the stands where the tree removals will occur.” (Forestry Statement, Appendix F-11). This irresponsible excuse for endangering the public does not acknowledge that there are people visiting these parks and taking their lives in their hands by doing so. The death of a park visitor to Stern Grove in 2008, is apparently insufficient testimony to the way the public is being endangered by these tree removals.

Either the planned tree removals must be decreased to reduce the risk of tree failures caused by windthrow or the final EIR must acknowledge the significant risk of these tree removals. [SFFA-3-03]

- The 2006 Pine Lake project is the best representation of the SNRAMPP proposed plan for tree removal and fencing in the Natural Areas. Pine Lake demonstrates how the removal of trees impacts the park by opening up the forest curtain to expose houses and how removal of trees results in wind throw which along with the understory removal results in erosion as demonstrated in the pictures in *Attachment C*. [Bowman-2-03]
- * Contrary to statements in the DEIR, we believe that removing 1600 trees would have a significant negative impact on the Mt. Davidson Forest. It would mean increased wind exposure, increased erosion, reduced carbon dioxide absorption, and loss of animal and bird habitat. And it would certainly alter our woodland hiking experience. [Risk-1-04]
- How does the nap plan translate into the reality of our urban parks? In my neighborhood park, not so well. At the western tip of Pine Lake, 25 trees were cut down in 2004. These trees served as a windbreak from the prevailing western winds for thousands of the other park trees for approximately a hundred years. Though it’s denied by the chairwoman of nap that the windbreak trees were destroyed so that native’s could be planted in their place - natives *were* planted in their place. In a very short time the native’s all died and the windbreak trees are gone forever. The nap chairwoman claims all those 25 trees were hazardous and taking them down had nothing to do with wanting an unshaded space for planting native’s. However it challenges plausibility that on a narrow hillside not more than about 100 feet wide that every single one of those 25 trees were in a hazardous condition. They were not judged all hazardous in 2003 when the Hort Science Arborists’ examined and graded every tree in the park. It’s been my experience that misleading responses from nap is not an unusual occurrence.

I’ve been walking in Stern Grove/Pine Lake park since 1970 when I got my first dog. So I can vouch for the fact that more trees have fallen onto public paths since the taking down of the windbreak trees than had happened in the past 42 years. In fact a death by falling tree limb did occur in 2008. Whether or not the removal of those trees played a part in that tragedy can’t be known for certain. However it is certain that park visitor’s life and limb have been more at risk since the irresponsible destruction of all those windbreak trees.

Lopping off branches in Glen Park and using toxic herbicides have been carried out illegally by nap during this critical nesting season. [Zeiger-1-02]

Response WS-1

These comments relate to potential wind impacts in several Natural Areas caused by the proposed tree removals, or, in the case of Pine Lake, previous tree removals, as well as potential safety impacts from falling trees or tree limbs.

It is correct that 82% of the trees within the MA-1c area would be removed. These trees would be removed from the center of MA-1c. As stated on Draft EIR p. 248, prevailing winds at Mount Davidson are from the west and southwest, so removing edge trees on the west side of the park could increase the rate of windthrow within the stand; however, no trees are proposed to be removed in these areas, minimizing or avoiding windthrow impacts in those locations. Similarly, SNRAMP Appendix F, p. F-11, states that:

“removal of edge trees on the northwest side of the park (MA-1c and MA-2c) could increase the rate of windthrow within the stand. Substantial tree removal in these areas should not occur. A significant number of mature trees should remain at the park edge to minimize the effects of wind on this stand. Small tree thinning is acceptable in the buffer area.”

SNRAMP Appendix F, p. F-11, goes on to state that “Tree removals in the MA-1 and MA-2 stands will not create windthrow hazards to residential areas because of their location within the stand and/or their location away from any homes.”

Ground-level wind hazards also would not increase along the trails of Mount Davidson because mostly small- and medium-sized trees would be selectively removed or thinned out rather than clear-cut. Further, as stated on Draft EIR p. 92, trees would be removed limb-by-limb, rather than by felling whole trees (unless tree removal presents a safety concern which would require felling of the tree). Some trees within the restoration zones would remain, as would most of the trees on the wind-hardened forest edges. Therefore, tree removal would not substantially decrease the density of the urban forest overall, expose people on the trails to excess wind, or result in high wind speeds.

Draft EIR p. 248 concludes that at Mount Davidson, some windthrow is likely to occur naturally within the stand and its edges, but removing trees from Mount Davidson is not expected to substantially alter the windthrow rates because tree removal would be conducted in accordance with Appendix F of the SNRAMP, which recommends that removal of edge trees in these areas are limited. Further, the removal of dead or aging trees would reduce the potential for windthrow hazards. Therefore, wind levels at Mount Davidson resulting from the programmatic projects would not substantially increase ground-level hazards or alter the windthrow rates. Thus, wind impacts of the programmatic projects at Mount Davidson would be less than significant.

In terms of the previous tree removal activities at Pine Lake, they are not within the scope of this project and, therefore, are not addressed in this EIR. However, in terms of the general concept of replacing nonnative trees with native species in order to increase biodiversity, refer to

Response PD-11, RTC p. 4-159. Further, as indicated by Table 5 of the Draft EIR, no trees would be removed at Pine Lake.

Impacts related to public safety associated with windthrow effects (e.g., falling trees) are discussed in Impact HZ-1 on Draft EIR p. 389. As discussed in Draft EIR Section V.E, Wind and Shadow, tree removal would not substantially change wind patterns; therefore, windthrow hazards would not cause a significant risk to humans and nearby residents. In general, tree removal would be focused on dead or dying trees, trees with disease or insect infestations, storm-damaged or hazardous trees, and trees that are suppressed because of overcrowding. Removing these trees would likely benefit public safety because damaged and dying trees may be at greater risk of falling and injuring visitors or residents. Alterations in wind patterns and impacts of ground-level wind hazards on pedestrians are analyzed in Section V.E. Also, Draft EIR p. 389 concludes that tree removal under the programmatic projects would result in less-than-significant windthrow effects on public safety.

<p>Comment WS-2 Disagree that all tree removal will have less than significant effects on wind</p>

The response to Comment WS-2 addresses all or part of the following individual comments:

Borden-1-06

Thomas-1-04

- I question the EIR's statement the impact of tree cutting on wind will be less than significant for all project alternatives. It will come down to which specific trees Natural Areas decides to cut. [Borden-1-06]
- Wind tunnels would be created by tree removal and pleasant micro-climates would be altered. [Thomas-1-04]

Response WS-2

These comments question the determinations in the Draft EIR concerning wind impacts from tree removal, both as a result of the proposed project and associated with the project alternatives, but provide no evidence or analysis supporting a different conclusion or concerns regarding a specific Natural Area.

The Draft EIR assessed the wind impacts of tree removal based on the specific tree removal details included in Draft EIR Chapter III, Project Description, and the Natural Areas maps in Draft EIR Appendix B, which identify the specific management areas proposed for tree removal. Draft EIR Section V.E, Wind and Shadow, pp. 242 to 251, provides analysis that supports the conclusion that the proposed project would not result in significant wind impacts. This determination is based on several factors discussed in the Draft EIR, including (1) trees would be removed gradually over a 20-year period; (2) most trees would be removed from interior areas of forest stands and not from the wind hardened forest edges; and (3) the majority of trees would be retained. In addition, the potential wind effects associated with each of the project alternatives are evaluated in Chapter VII, Alternatives (p. 469 – No Project Alternative, p. 484 – Maximum Restoration Alternative, p. 497 –

Maximum Recreation Alternative, and pp. 514 to 515 – Maintenance Alternative). As with the proposed project, all wind-related impacts associated with the alternatives would be less than significant.

4.D.9 Recreation [RE]

The comments and corresponding responses in this section cover topics in Draft EIR Chapter V, Section V.F, Recreation.

Comment RE-1 Actual number of dog play areas is 29, not 19, and total acreage of DPAs is 120 acres, including DPAs outside of the Natural Areas

The response to Comment RE-1 addresses all or part of the following individual comments:

DogPACSF-1-08
Bartolotta-1-08

SFDOG-1-02
Brown-1-05

SFDOG-2-09
PH-Stephens-02

- The number of DPAs in city parks listed in the NAP EIR is wrong. Page 155 says there are 19 DPAs, when the actual number is 29. To get such a basic fact wrong is shocking and calls into question other information about dogs, such as their alleged “impacts” on plants and wildlife. [DogPACSF-1-08] [SFDOG-2-09] [Bartolotta-1-08] [Brown-1-05]
- The EIR incorrectly states the number and total acreage of off-leash Dog Play Areas (or DPAs). There are actually 29, which cover about 120 acres total. [SFDOG-1-02]
- The EIR incorrectly states the number and total acreage of all placed dog play areas, or DPAs. There are actually 29, which cover about 120 acres total, but 80 percent of that total is located either within or adjacent to a natural area and is therefore at risk of future closure if NAP claims impacts from the dogs. [PH-Stephens-02]

Response RE-1

These comments indicate that there are actually 29 DPAs in the city as compared to what is provided in the Draft EIR (19) and that there are a total of 120 existing acres of DPAs, which includes DPAs outside of the Natural Areas.

Based on SFRPD data, there are over 30 existing designated off-leash City DPAs in San Francisco totaling over 120 acres. The text on Draft EIR p. 155 (line 29) has been changed, as follows:

The SFRPD welcomes dogs on leashes in most of its parks; dogs are allowed off-leash in 19 over 30 existing designated areas DPAs totaling over 120 acres in San Francisco, seven of which are located in the Natural Areas.

Similarly, the text on Draft EIR p. 254 (first paragraph) has been changed, as follows:

There are 19 over 30 existing designated DPAs totaling over 120 acres that support off-leash dog use within San Francisco, seven of which are located in the Natural Areas. They are Bernal Hill, Buena Vista Park, Corona Heights, Golden Gate Park Oak Woodlands, Lake Merced, McLaren Park, and Pine Lake.

As previously mentioned, and affirmed by the above text change, there are over 30 existing designated DPAs totaling over 120 acres that support off-leash dog use within San Francisco, seven of which are located in the Natural Areas. In addition, DPAs exist on other publicly accessible locations throughout San Francisco, such as at the GGNRA, Rincon Hill, Heron's Head, and Mission Bay. As shown in Draft EIR Table 5 on Draft EIR, Summary of Natural Areas Management Plan, p. 114, a total of 19.3 acres of DPAs would be reduced in size or closed to off-leash dog use within three Natural Areas (one would be closed and two would be reduced in size), resulting in 75.9 acres (or 80 percent) of off-leash DPAs within the Natural Areas that would remain open. Additionally, within the 31 parks that contain Natural Areas within San Francisco and at Sharp Park, there are a total of approximately 2,724 acres of parkland, and additional acreage is available at other parks throughout the city, all of which can be used by dogs that are on leash. Refer also to Response RE-13, RTC p. 4-347, for a more detailed discussion of the closure of one DPA and the reduction in size of two DPAs, as well as the amount of on-leash and off-leash areas that are available throughout the City.

Comment RE-2	Characterization of dog play area moratorium
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The response to Comment RE-2 addresses all or part of the following individual comments:

DogPACSF-1-09

SFDOG-2-10

Bartolotta-1-09

Brown-1-06

- The NAP EIR incorrectly summarizes RPD's so-called moratorium on creating new DPAs until a systemwide survey of DPAs is conducted. The NAP EIR says that this moratorium was a directive from the Rec and Park Commission that was announced at the October 10, 2006 meeting of the RPD Dog Advisory Committee (DAC). This is not true. The idea of a systemwide survey of where dogs and DPAs are in San Francisco came not from the Commission, but from RPD staff. It was not discussed at the October 2006 DAC meeting. It was not fully discussed in the DAC until 2007 when RPD made the decision to "sunset" the DAC and conduct the citywide survey. While the survey was being conducted, the DAC was told, there would be a hold on new DPAs. The DAC was told the survey would take maybe a year or a year and a half at the most. The idea of the citywide survey was not presented to the Rec and Park Commission until mid-2007. This was no "direction from the Commission." This hold was never meant to be permanent. Yet the NAP EIR implies it will last for decades (the length of time covered by the NAP EIR) and therefore the EIR does not have to consider new DPAs. In the four years since the DAC was sunset, however, RPD has done nothing on the citywide survey. And now this inaction by RPD is being used to prevent the EIR from considering whether or not creating new DPAs to replace ones closed by NAP could decrease the impacts of the closures. [DogPACSF-1-09] [Brown-1-06]
- The NAP EIR incorrectly summarizes RPD's so-called moratorium on creating new DPAs until a systemwide survey of DPAs is conducted. The NAP EIR says that this moratorium was a directive from the Rec and Park Commission that was announced at the October 10, 2006 meeting of the RPD Dog Advisory Committee (DAC). This is not true. The idea of a

systemwide survey of where dogs and DPAs are in San Francisco came not from the Commission, but from RPD staff. It was not discussed at the October 2006 DAC meeting. It was not fully discussed in the DAC until 2007 when RPD made the decision to "sunset" the DAC and conduct a citywide survey. While the survey was being conducted, the DAC was told, there would be a temporary hold on new DPAs. The DAC was told the survey would take maybe a year or a year and a half at the most. The idea of the citywide survey was not presented to the Rec and Park Commission until mid-2007. This was no "direction from the Commission." The Commission was only called upon to agree to sunset the DAC. The hold on new DACs was never meant to be permanent. Yet the NAP EIR implies it will last for decades (the length of time covered by the NAP EIR) and therefore the EIR does not have to consider new DPAs. In the four years since the DAC was sunset, however, RPD has done nothing on the citywide survey. And now this inaction by RPD is being used to prevent the EIR from considering whether or not creating new DPAs to replace ones closed by NAP could decrease the impacts of the closures. [SFDOG-2-10]

- The NAP EIR incorrectly summarizes RPD's so-called moratorium on creating new DPAs until a systemwide survey of DPAs is conducted. The NAP EIR says that this moratorium was a directive from the Rec and Park Commission that was announced at the October 10, 2006 meeting of the RPD Dog Advisory Committee (DAC). This is not true. The idea of a systemwide survey of where dogs and DPAs are in San Francisco came not from the Commission, but from RPD staff. It was not discussed at the October 2006 DAC meeting. It was not fully discussed in the DAC until 2007 when RPD made the decision to "sunset" the DAC and conduct the citywide survey. While the survey was being conducted, the DAC was told, there would be a hold on new DPAs. The DAC was told the survey would take maybe a year or a year and a half at the most. The idea of the citywide survey was not presented to the Rec and Park Commission until mid-2007. This was no "direction from the Commission." This hold was never meant to be permanent. Yet the NAP EIR implies it will last for decades (the length of time covered by the NAP EIR) and therefore the EIR does not have to consider new DPAs. In the four years since the DAC was sunset, however, RPD has done nothing on the citywide survey. And now this inaction by RPD is being used to prevent the EIR from considering whether or not creating new DPAs to replace ones closed by NAP could decrease the impacts of the closures. The NAP plan will last for decades, and for the NAP EIR not to consider a major mitigation like opening new DPAs to replace closed ones because of a temporary halt on new designations is absurd. Any analysis of alternatives that does not include this possible mitigation is incorrect and inadequate. [Bartolotta-1-09]

Response RE-2

These comments express the opinion that the Draft EIR incorrectly describes the SFRPD's moratorium on creating new DPAs.

As further discussed in Response G-23, RTC p. 4-93, the Draft EIR conservatively characterized the direction from the Recreation & Park Commission concerning establishment of new DPAs as a moratorium for the purpose of analyzing cumulative impacts in the Natural Areas. This direction was presented at the October 10, 2006, meeting of the San Francisco Dog Advisory Committee;

addressed in a July 19, 2007, SFRPD memorandum on the Status of the Dog Advisory Committee Work Plan; and discussed during the August 16, 2007, meeting of the San Francisco Recreation & Park Commission. New or improved DPAs may be pursued in San Francisco by the SFRPD and/or through community-driven efforts; however, none are proposed or envisioned in the Natural Areas.

The EIR concludes that the proposed closure and reduction of DPAs would not result in significant impacts to recreational resources (Impact RE-1 and Impact RE-4). However, when combined with impacts resulting from the GGNRA Dog Management Plan, the Draft EIR conservatively determines that the cumulative impact of these two projects could accelerate the physical deterioration of the remaining DPAs and the Natural Areas in general (Impact RE-7 on Draft EIR pp. 261 to 262), resulting in a significant and unavoidable impact. To clarify and expand upon the analysis provided in the Draft EIR, the cumulative impact analysis provided in Impact RE-7 on Draft EIR pp. 261 and 262 has been changed as follows:

Impact RE-7: The proposed project, in combination with other planned and foreseeable future projects, would result in a cumulatively considerable significant impact related to recreation. (Significant and Unavoidable)

The geographic scope of this analysis includes San Francisco and Pacifica. Cumulative projects that would have an impact on recreation resources include those that reduce the overall recreation experience provided by the Natural Areas. This includes projects that may result in a significant increase in the regional population resulting in overcrowding of the Natural Area, a decrease in currently available recreation opportunities, consequently putting increased pressure that is unable to be absorbed by other Natural Areas, or a physical or visual change in the landscape that adversely impacts the appeal of a Natural Area.

Implementation of the proposed GGNRA Dog Management Plan ~~may~~would further restrict dog access and off-leash areas within GGNRA land holdings, including Fort Funston (near Lake Merced), Fort Mason, Crissy Field, Fort Point National Historic Site, Baker Beach, Lands End, Fort Miley, Sutro Heights Park (near Balboa), Ocean Beach (the north end near Balboa), Milagra Ridge (near Sharp Park), Mori Point (near Sharp Park), and Sweeney Ridge (near Sharp Park). At both Fort Funston and Milagra Ridge, as part of the GGNRA General Management Plan, recreational activities would be provided in a more natural setting to protect natural ecosystems and sensitive habitats.

The GGNRA Dog Management Plan⁸¹ designates specific areas where dogs would be required to stay on leash, where dogs may be allowed off-leash, but only when under immediate voice and sight control, and where dog walking would be prohibited. In San Francisco, off-leash dog walking would be permitted in six areas: Fort Mason; Crissy Field (two areas); Ocean Beach; and Fort Funston (two areas).

The most popular locations for GGNRA dog use is Crissy Field and Fort Funston. At Fort Funston, of the total of 180 acres (excluding the 10-acre Bank Swallow Protection Area), approximately 95 acres are steep cliffs or dense vegetation and are not accessible for any use. Of the remaining 85 acres, 35 acres (or 41 percent) would be available for off-leash dog use. At Crissy Field, 30 percent of the airfield and 40 percent of the beach front mileage would be available for off-leash dog use. Overall, of the 8.7 miles of beaches within GGNRA jurisdiction, about 2.3 miles (over 26 percent) would be available for off-leash dog use. In addition, much of the remaining GGNRA lands would be open to dogs on-leash.

To collect current and detailed information regarding visitor use of the park by dog owners, NPS conducted a survey in 2012 to measure customer satisfaction related to dog walking at the GGNRA sites and to determine where visitors would go if they were not satisfied. This survey, the *GGNRA Dog Walking Satisfaction Visitor Study*, evaluated the perception of and satisfaction with the current on and off-leash GGNRA dog walking policies by both dog walkers and non-dog walkers, and the potential for redistribution of use based on the proposed access changes. Of the approximately 7,000 individuals contacted, 897 responded to the survey. Respondents included 662 dog walkers, 20 commercial dog walkers, and 212 individuals who do not walk dogs at the park. These same respondents were then asked where they would go (either inside or outside GGNRA) as an alternative site for dog walking. The five most popular alternative sites indicated in the survey for off-leash dog walking included Pine Lake/Stern Grove, Golden Gate Park (all areas), McLaren Park, Ocean Beach, and Alta Plaza.

In addition, ~~†~~The SNRAMF proposes to close the Lake Merced DPA and reduce the size of the DPAs at Bernal Hill and McLaren Park. Of the DPAs impacted by the SNRAMF, only McLaren Park was identified by the GGNRA visitor study survey as a potential alternative off-leash dog-walking site. On-leash dog use would still be allowed at these and all other Natural Areas (except at Lake Merced). Nonetheless, ~~†~~the combined reductions in off-leash areas proposed by the GGNRA and the SFRPD could result in an increase in dog use at the remaining Natural Areas, including McLaren Park, which would be reduced by 8.3 acres, with 53.4 acres remaining.

⁸¹ The GGNRA Draft Dog Management Plan/Supplemental Environmental Impact Statement (SEIS), which contained six alternatives, was released in September 2013. Subsequently, in February 2016, the Proposed Rule for Dog Management in the GGNRA was released for a 60-day comment period. On February 24, 2016, the Proposed Rule for Dog Management in the GGNRA opened for a 60-day public comment period on www.regulations.gov (RIN 1024-AE16). The comment period was later extended to 90 days and ended on May 25, 2016. All substantive comments on both the SEIS and Proposed Rule will be documented and responded to by NPS in a Final Environmental Impact Statement FEIS. These comments, along with relevant data, expert opinions, and other facts accumulated during the SEIS and Proposed Rule stages, will be evaluated by NPS to determine whether the proposed solution will help accomplish the goals and solve the problems identified in the SEIS before moving forward with a Final Environmental Impact Statement, Record of Decision, and Final Rule. While no specific alternative has been selected, it is reasonable to assume that the reduction in off-leash dog play areas would occur as a result of implementation of one of the Plan's alternatives.

Consistent with the conclusion of the cumulative analysis contained in the GGNRA Supplemental Environmental Impact Statement,⁸² it is speculative to precisely identify the magnitude or location of redistribution of dog walkers related to the implementation of the SNRAMP in combination with the GGNRA Dog Management Plan. Numerous factors are difficult to predict, including human behavior, level of future restrictions within and outside of the Natural Areas and GGNRA lands, and physical factors, such as driving distances.

While both the SNRAMP and GGNRA propose the reduction of off-leash DPAs, new or improved DPAs may be pursued in San Francisco by the SFRPD and/or through community-driven efforts, although none are proposed or envisioned in the Natural Areas. However, for the purposes of this EIR, it is assumed that no new DPAs are reasonably foreseeable to provide a worst-case analysis. It is further assumed that ~~An~~ an increase in dog use at the Natural Areas could accelerate the physical deterioration of those DPAs and the Natural Areas in general, ~~and. Given the speculative nature of the increased level of use that could result from these proposals,~~ the impacts to recreation are conservatively determined to be significant from the combined cumulative projects. The contribution of the SNRAMP project to this potentially significant impact would be cumulatively considerable, specifically as a result of the closure of the Lake Merced DPA.

DPAs within the Natural Areas would continue to be evaluated in accordance with the SFRPD's Dog Policy, ~~and~~ the SFRPD would monitor DPAs for their effects on the Natural Areas and develop solutions to any identified issues. ~~These established procedures are considered adequate, and further monitoring procedures would not be expected to reduce the impact.~~ The potentially significant impact to recreational resources as a result of increased use resulting from cumulative actions could be mitigated by adding a new DPA at a nearby Natural Area or other nearby property. However, as discussed above, adding a new DPA may not mitigate impacts from reducing or closing DPAs because it is speculative to precisely predict the magnitude or location of redistribution of dog walkers related to the implementation of the SNRAMP in combination with the GGNRA Dog Management Plan. Numerous factors are difficult to predict, including human behavior, level of future restrictions within and outside of the Natural Areas and GGNRA lands, and physical factors, such as driving distances. Therefore, no feasible mitigation exists that would reduce this impact. ~~as discussed in this document, there is a current moratorium⁸³ on new DPAs, and the mitigation, therefore, would not be feasible.~~ As a result, this impact would be *significant and unavoidable*.

Refer to Response RE-3, RTC p. 4-319, for a discussion of the status of the environmental review process for the GGNRA's Dog Management Plan.

⁸² National Park Service, Golden Gate National Recreation Area California, Draft Dog Management Plan/Supplemental Environmental Impact Statement, Fall 2013 (page 354).

⁸³ There is direction from the Recreation and Park Commission not to establish new DPAs until systemwide DPA planning is completed. For the purposes of this EIR, this is considered a moratorium in that no new DPAs are reasonably foreseeable. This direction was announced at the October 10, 2006, meeting of the San Francisco Dog Advisory Committee.

Comment RE-3 Use GGNRA estimate of closing 90% of off-leash lands for cumulative analysis

The response to Comment RE-3 addresses all or part of the following individual comments:

CFDG-1-06	DogPACSF-1-01	DogPACSF-1-07
SFDOG-2-08	Bartolotta-1-07	Brown-1-04
Emanuel-1-03	Emanuel-2-03	Pittin-1-03
Vitulano-1-02		

- This EIR acknowledges that there is likely to be a significant and unavoidable impact of DPA closures when combined with closures of off-leash area in the GGNRA. However, the EIR says the nature of the GGNRA closures is “speculative” and therefore it doesn’t try to analyze the level of the combined impacts. However, we know that the GGNRA proposed to cut a substantive amount of its off-leash space, and this EIR should analyze the impact of that level of closure when combined with the NAP closures of 15% and 80%. [CFDG-1-06]
- If the GGNRA Master and Dog Management Plans are implemented, the overflow for resident and dog recreation will overcrowd our city parks. To date, the GGNRA has not provided the city with any analysis or metrics of the effects of their plans on city assets.

This must be accounted for BEFORE ANY sweeping adjustment to city parks is considered.

I know of no known science that shows any ill effects of dogs on open spaces. Humans are the most widely perpetrators of environmental destruction, not dogs. [DogPACSF-1-01]

- The NAP EIR acknowledges that the NAP plans to close 15% of the DPAs in city parks immediately, when added to the GGNRA’s plans to cut off-leash access by 90%, will have a significant and unavoidable cumulative impact on remaining off-leash areas in city parks and on recreation. However, the EIR says that because they don’t know the final GGNRA plan, they cannot analyze what that cumulative impact will be. We do know what the GGNRA originally proposed (cutting off-leash access on its lands by 90%) and the cumulative impact of that plan, when combined with the NAP closures can and should be analyzed. We saw on Tsunami Friday what the impacts could be. The GGNRA closed both Fort Funston and Ocean Beach to all visitors on the morning of Friday, March 11, 2011 because of concerns that a tsunami triggered by a major earthquake in Japan would strike the coast. The busiest weekend days normally find about 60 dogs at the Pine Lake DPA at any one time. Weekday mornings normally have far fewer, closer to 20. On Tsunami Friday, a Rec and Park Dept staffer counted over 200 dogs at the Pine Lake DPA at 10 am, almost 10 times more dogs than on a normal weekday and more than 3 times the maximum numbers of dogs seen on weekends. This example can be used to quantify the cumulative impacts of the GGNRA and NAP closures of off-leash space. The analysis presented in the EIR, which does not contain this, is inadequate. [DogPACSF-1-07] [Brown-1-04]
- However, the EIR says that because they don’t know the final GGNRA plan, they cannot analyze what that cumulative impact will be. We do know what the GGNRA originally proposed (cutting off-leash access on its lands by 90%) and the cumulative impact of that plan, when combined with the NAP closures (especially the possible closure of 80% of DPAs)

can and should be analyzed in the NAP EIR. We saw on Tsunami Friday what the impacts could be. The GGNRA closed both Fort Funston and Ocean Beach to all visitors on the morning of Friday, March 11, 2011 because of concerns that a tsunami triggered by a major earthquake in Japan would strike the coast. On Tsunami Friday, a Rec and Park Dept staffer counted over 200 dogs at the Pine Lake DPA at 10 am, almost 10 times more dogs than on a normal weekday (normally about 20 dogs at one time) and more than 3 times the maximum numbers of dogs seen on busy weekends (about 60 dogs at a time). This example can be used to quantify the cumulative impacts of the GGNRA and NAP closures of off-leash space. The effects of Tsunami Friday were mentioned in an article in the March 2011 issue of the *West Portal Monthly*. The analysis presented in the EIR, which does not contain this, is inadequate. [SFDOG-2-08]

- The NAP EIR acknowledges that the NAP plans to close 15% of the DPAs in city parks immediately, when added to the GGNRA's plans to cut off-leash access by 90%, will have a significant and unavoidable cumulative impact on remaining off-leash areas in city parks and on recreation. However, the EIR says that because they don't know the final GGNRA plan, they cannot analyze what that cumulative impact will be. We do know what the GGNRA originally proposed (cutting off-leash access on its lands by 90%) and the cumulative impact of that plan, when combined with the NAP closures (especially the possible closure of 80% of DPAs) can and should be analyzed. We saw on Tsunami Friday what the impacts could be. The GGNRA closed both Fort Funston and Ocean Beach to all visitors on the morning of Friday, March 11, 2011 because of concerns that a tsunami triggered by a major earthquake in Japan would strike the coast. The busiest weekend days normally find about 60 dogs at the Pine Lake DPA at any one time. Weekday mornings normally have far fewer, closer to 20. On Tsunami Friday, a Rec and Park Dept staffer counted over 200 dogs at the Pine Lake DPA at 10 am, almost 10 times more dogs than on a normal weekday and more than 3 times the maximum numbers of dogs seen on weekends. This example can be used to quantify the cumulative impacts of the GGNRA and NAP closures of off-leash space. The analysis presented in the EIR, which does not contain this, is inadequate. [Bartolotta-1-07]
- The SFNAP EIR does not adequately consider or measure the impacts the GGNRA's Dog Management Plan will have on San Francisco city parks. [Emanuel-1-03] [Emanuel-2-03]
- The NAP EIR does not recognize the other needs and uses for San Francisco open space, and does not reflect the pressures which are created also by possible changes in the GGNRA, our other recreational space. We cannot dedicate our recreational and open spaces primarily to creating a plant museum from an arbitrary "pre-European" era when all was "natural" and "native". [Pittin-1-03]
- The Dog Play Areas (DPA) are important for adults and children, and this impact comes as the GGNRA is also proposing radical cuts to dog recreation space. The cumulative impacts to recreation from these plans are unacceptable. [Vitulano-1-02]

Response RE-3

These comments relate to the impacts that would occur with implementation of the SNRAMP combined with the GGNRA Dog Management Plan; one commenter requests a quantitative analysis of these impacts.

The SNRAMP Draft EIR provides a qualitative analysis of the cumulative effects of the SNRAMP and the GGNRA Dog Management Plan and acknowledges that both the SNRAMP and the GGNRA Dog Management Plan would result in reductions in the available off-leash areas within properties under their respective jurisdictions, which could result in an increase in dog use at the remaining Natural Areas. It also states that because it would be speculative to project the increased level of use at other DPAs that could result from implementation of these proposals, the Draft EIR conservatively identifies the cumulative impact as significant and unavoidable.

This analysis satisfies the CEQA requirements to disclose potentially significant cumulative impacts. As provided by CEQA Guidelines Section 15130(b), “[t]he discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone.” The NPS’s 2011 Dog Management Plan/Environmental Impact Statement, which was considered in the SNRAMP Draft EIR, presented six alternatives at 22 sites for the management of dog walking activities at GGNRA lands. Because of the diversity of resources and the variety of use patterns across these park sites, a site-specific approach to analyzing the alternatives was adopted, resulting in a preferred alternative for each site. Given the substance of many of the comments received on the 2011 Draft Dog Management Plan/Environmental Impact Statement, availability of additional data and studies, and potential changes to the alternatives and impacts analysis resulting from that information, a Supplemental EIS (SEIS) was developed for the draft Dog Management Plan, with the comment period for the SEIS closing on January 11, 2014. On February 24, 2016, the Proposed Rule for Dog Management in the GGNRA opened for a 60-day public comment period on www.regulations.gov (RIN 1024-AE16). The comment period was later extended to 90 days and ended on May 25, 2016. All substantive comments on both the SEIS and Proposed Rule will be documented and responded to in a Final Environmental Impact Statement FEIS. These comments along with relevant data, expert opinions, and other facts accumulated during the SEIS and Proposed Rule stages will be evaluated to determine whether the proposed solution will help accomplish the goals and solve the problems identified in the SEIS before moving forward with a Final Environmental Impact Statement, Record of Decision, and Final Rule.

The key changes between the 2011 EIS, considered in the SNRAMP Draft EIR, and the 2013 SEIS, considered as part of the SNRAMP Responses to Comments, include the addition of new data; consideration of additional research; changes to the impact analysis (including additional analysis of potential redistributive effects of opening/closing areas to dog walking); changes to the compliance-based management strategy by including natural and cultural resource monitoring and removing

automatic triggers and restrictions (now the monitoring-based management strategy); evaluation of fencing as a future management option to manage dog walking impacts; changes to dog walking access at some sites in the preferred alternative; and site-specific alternatives and analysis for Rancho Corral de Tierra in San Mateo County. The alternatives evaluated in the SEIS include (1) no action (Alternative A); (2) NPS leash regulation (Alternative B); (3) emphasis on multiple use balanced by county (Alternative C); (4) most protective of resources and visitor safety (Alternative D); (5) most dog walking access and most management intensive (Alternative E); and (6) mix of alternatives based on public comment (Alternative F, the preferred alternative).

While the Proposed Rule is assumed as part of the cumulative projects for this project, it does not result in a different conclusion regarding the significant and unavoidable cumulative recreation impacts identified in Impact RE-7. Response RE-2, RTC p. 4-313, further clarifies and expands upon the recreational cumulative impact analysis provided in Impact RE-7.

Refer to Response TR-2, RTC p. 4-280, for a discussion of visitor use data at Lake Merced, where there is limited use. However, with respect to the Natural Areas included in the SNRAMP, the SFRPD also collected data for Bernal Heights, McLaren Park, Buena Vista, Corona Heights, and Pine Lake, as provided in a new Appendix K of the EIR. Excluding Lake Merced, which only had a maximum of one dog and one owner over three visits, the total recorded use by dogs and owners at Bernal Heights and McLaren Park was 39 (30 dogs and 9 owners) and 26 (19 dogs and 7 owners), respectively. The estimated hourly use for Bernal Heights was 60 dogs and 18 owners and for McLaren Park, it was 25 dogs and 9 owners. The DPA counts for Bernal Heights and McLaren Park were taken in 2009, while the DPA counts for Lake Merced were taken in 2011.

Comment RE-4 Address increase in passive recreation for cumulative analysis

The response to Comment RE-4 addresses all or part of the following individual comment:

Holzman-1-06

- The potential cumulative impacts discussed re: Impact RE-7: does not address the potential for an increase in passive recreation; i.e., the ability of citizens to appreciate the natural landscape and wildlife that would improve with the plan, or the lessening of dog-people/children conflicts in areas where dogs off leash would be curtailed. I would suggest the overall recreation opportunities when passive recreation is included would be increased if the plan was implemented. [Holzman-1-06]

Response RE-4

This comment states that the SNRAMP will increase passive recreation.

Impact RE-7, on Draft EIR p. 262, addresses the cumulative impact associated with passive recreational uses; Impact RE-7 was further clarified and expanded in Response RE-2, RTC p. 4-313. This impact states that new developments could bring additional recreation users to the Natural

Areas, which could increase the use of those natural areas, resulting in some crowding, degrading the overall passive recreation experience over time. In terms of the cumulative impact analysis related to passive recreational uses, Draft EIR p. 263 concludes that the cumulative impact on recreational resources (and specifically passive recreational uses, to which this commenter refers) would be beneficial and less than significant. The commenter also confirms the Draft EIR conclusions, suggesting that the SNRAMP would beneficially increase passive recreational opportunities.

As stated on Draft EIR p. 263, in addition to proposed improvements and regular maintenance, as a part of the SFRPD Trails Program, trails would be improved with SFRPD- and/or grant-funded capital projects. Trail improvement in areas surrounding the 32 Natural Areas would dissipate recreation users throughout the trail system and would enhance the experience of passive recreation users overall, resulting in a beneficial and *less-than-significant* cumulative impact on recreational facilities.

Comment RE-5	Consider adding holes to the Sharp Park Golf Course east of Highway 1
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The response to Comment RE-5 addresses all or part of the following individual comment:

PH-Antonini-07

- And also I did not see an alternative that utilized some of the space to the east of Highway 1, which now has four holes – I believe it’s either three or four – and I always thought when I was golfing there that that would be a great place to put a couple of extra holes.
[PH-Antonini-07]

Response RE-5

This comment states that an alternative was not evaluated that includes the use of the land east of Highway 1 for additional golf holes.

As discussed in Response RE-6, RTC p. 4-322, Draft EIR Mitigation Measure M-RE-6, Restoration of the Sharp Park Golf Course to 18 Playable Holes, p. 264, identifies two options for restoring the playability of the Sharp Park Golf Course. As identified in that mitigation measure, on Draft EIR p. 261, Option 2 would provide a new hole to the east of Highway 1, increasing the number of holes to the east of the highway from four to five.

Comment RE-6	Replace the removed hole at the Sharp Park Golf Course to maintain 18 holes
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The response to Comment RE-6 addresses all or part of the following individual comment:

PH-Antonini-06

- I did not see – and maybe staff can answer this question, Jessica Range in particular – uhm, I didn’t see – there’s talk about removing one of the holes of Sharp Park, and is there a

replacement? I did not see that in the EIR. Maybe it's in there and I didn't read carefully enough, because a 17-hole golf course doesn't work real good for me. [PH-Antonini-06]

Response RE-6

This comment questions whether one hole would be removed and also replaced.

The purpose of Draft EIR Mitigation Measure M-RE-6, Restoration of the Sharp Park Golf Course to 18 Playable Holes, p. 264, is to restore the playability of the Sharp Park Golf Course as an 18-hole course. As discussed in Mitigation Measure M-RE-6, and also described in Response PD-13, RTC p. 4-175, two options for replacement of Hole 12 are contemplated: Option 1 would replace the hole on the west side of Highway 1 and Option 2 would replace the hole on the east side of the highway.

Comment RE-7 If Bernal Hill and McLaren Park are closed, remaining dog play area land would be less suitable

The response to Comment RE-7 addresses all or part of the following individual comments:

DogPACSF-1-11
Brown-1-08

SFDOG-2-12

Bartolotta-1-10

- The NAP EIR assumes that, because the DPAs at McLaren Park and Bernal Hill are not being closed completely, the 15% closures will not cause a significant number of people to drive to other parks to walk their dogs. People will just walk in different parts of the parks that are still off-leash, the EIR assumes. However, the NAP EIR does not take into account the topography of the remaining land in the two DPAs. If what is left is mostly steep hills, people will not be able to walk there with their dogs. Thus, even though the acres of off-leash space may remain relatively high in these two parks, the amount of space that is practically available for off-leash access may be much less. This will increase the impacts on recreation and also will make it more likely that people will be forced to drive to other parks to walk their dogs off-leash. This must be included in the analysis of any and all alternatives. Since it is not, the analysis in the NAP EIR is inadequate. [DogPACSF-1-11] [Bartolotta-1-10] [Brown-1-08]
- The NAP EIR assumes that, because the DPAs at McLaren Park and Bernal Hill are not being closed completely, the proposed immediate closures in those parks (13% at McLaren, 29% at Bernal Hill) will not cause a significant number of people to drive to other parks to walk their dogs. People will just walk in different parts of the parks that are still off-leash, the EIR assumes. However, the NAP EIR does not take into account the topography of the remaining land in the two DPAs. If what is left is mostly steep hills, people will not be able to walk there with their dogs. Thus, even though the acres of off-leash space may remain relatively high in these two parks, the amount of space that is practically available for off-leash access may be much less. This will increase the impacts on recreation and also will make it more likely that people will be forced to drive to other parks to walk their dogs off-leash. Topography must be included in the analysis of any and all alternatives. Since it is not, the analysis in the NAP EIR is inadequate. [SFDOG-2-12]

Response RE-7

These comments express the opinion that the Draft EIR did not consider the steepness of the topography that would remain within the McLaren Park and Bernal Hill DPAs, rendering some of the remaining area inaccessible for dog walking. These comments also generally question whether reducing the DPAs at McLaren Park and Bernal Hill would cause people to drive to other parks, which is also addressed in Response TR-1, RTC p. 4-279.

The proposed project would not close the DPAs at either McLaren Park or Bernal Hill. Rather, 8.3 acres of the 61.7-acre DPA at McLaren Park and 6 acres of the 21-acre DPA at Bernal Hill would be converted to on-leash use. The portion of the Bernal Hill DPA proposed for conversion to on-leash use contains sensitive MA-1 habitat areas located on very steep slopes, some of which are inaccessible due to their steepness (refer to Recommended Management Action BH-3a on Draft EIR p. 118, which states that off-leash activities would be limited to the relatively flat areas of Bernal Hill to avoid impacts to sensitive plant species). The remaining 15 acres of off-leash DPA at Bernal Hill is less steep than the area proposed to be converted to on-leash use. Therefore, the areas that are less steep are being retained as off-leash areas. The 8.3-acre portion of the McLaren Park DPA to be converted to on-leash use includes Gray Fox Creek, a sensitive natural community (as indicated in Recommended Management Action MP-9a on Draft EIR p. 139). The slopes in the remaining 53.4 acres of off-leash DPA in McLaren Park are characterized as gentle to moderate with ample areas available for off-leash recreation. As discussed on Draft EIR p. 258, the DPA reductions would not be substantial enough to result in the physical deterioration or accelerated deterioration of recreational facilities because the DPA at Lake Merced is not heavily used and the Bernal Hill and McLaren Park DPA reductions represent a small portion of otherwise large DPAs. Also, in Draft EIR Chapter VII, Alternatives, pp. 470, 498, and 515, the impacts associated with maintaining the off-leash DPAs are discussed as part of the No Project, Maintenance, and Maximum Recreation Alternatives analyses.

Refer also to Response TR-1, RTC p. 4-279, for a discussion of impacts related to the potential for people to drive to other DPAs if the DPAs at Lake Merced, McLaren Park, and Bernal Hill were closed or reduced in size.

Comment RE-8	Impacts resulting from restrictions on recreational access
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The response to Comment RE-8 addresses all or part of the following individual comments:

DogPACSF-1-19

SFDOG-2-20

SFFA-3-18

Brown-1-16

Jake-1-08

- The NAP EIR does not consider impacts on recreation and land use from the fact that NAP controls the entire park in over half of the parks (18 of 32) where there is a natural area. No other recreational use is possible in those parks. In an additional 10 parks, NAP controls over 50% of the land. Only four of the 32 parks with natural areas have less than 50% of their land

controlled by the NAP. A majority of land under NAP control citywide (57%) will have significant restrictions to access by all people (not just people with dogs); that is the amount of land designated as MA-1 and MA-2. In 8 parks, all of the land in the natural area are designated as MA-1 and MA-2, with resulting significant restrictions on access to everyone. In some cases, this denial of access will be in the only park within easy walking distance in the neighborhood. The NAP EIR must consider this large-scale denial of access when analyzing the Project Alternative. [DogPACSF-1-19]

- The NAP EIR does not consider impacts on recreation and land use from the fact that NAP controls the entire park in over half of the parks (18 of 32) where there is a natural area. No other recreational use is possible in those parks. In an additional 10 parks, NAP controls over 50% of the land. Only four of the 32 parks with natural areas have less than 50% of their land controlled by the NAP. A majority of land under NAP control (57%) will have significant restrictions to access by all people (not just people with dogs); that is the amount of land designated as MA-1 and MA-2. In 8 parks, all of the land in the natural area is designated as MA-1 and MA-2, with resulting significant restrictions on access to the entire park by everyone. In some cases, this denial of access will be in the only park within easy walking distance in the neighborhood. The NAP EIR must consider the impact of this large-scale denial of access on recreation and people (not just those with dogs) having to drive to another park to play catch with their kids when analyzing the Project Alternative and other alternatives. [SFDOG-2-20]
- A majority of land under NAP control citywide (57%) will have significant restrictions to access by all people (not just people with dogs); that is the amount of land designated as MA-1 and MA-2. In 8 parks, all of the land in the natural area are designated as MA-1 and MA-2, with resulting significant restrictions on access to everyone. In some cases, this denial of access will be in the only park within easy walking distance in the neighborhood. The NAP EIR must consider this large-scale denial of access when analyzing the Project Alternative. [Brown-1-16]
- Where NARMP controls the entire park, the NARMP EIR does not adequately consider impacts on the specifics of recreation and land use. No other recreational use is possible in those parks. In an additional 10 parks, NARMP controls over 50% of the land. Only four of the 32 parks with natural areas have less than 50% of their land controlled by the NARMP. A majority of land under NARMP control citywide (57%) will have significant restrictions to access by all people (not just people with dogs); that is the amount of land designated as MA-1 and MA-2. In 8 parks, all of the land in the natural area are designated as MA-1 and MA-2, with resulting significant restrictions on access to everyone. In some cases, this denial of access will be in the only park within easy walking distance in the neighborhood. The NARMP EIR must consider this large-scale denial of access when analyzing the Project Alternative. [Jake-1-08]

Response RE-8

A majority of these comments contend that with respect to DPAs “a majority of land under NAP control citywide (57%) will have significant restrictions to access by all people.” Other commenters

request that the EIR consider an alternative that results in fewer restrictions to public access in the Natural Areas.

The designation of areas as Management Areas 1 and 2 (MA-1 and MA-2) does not remove recreational access, although in some areas it may restrict access of off-leash dog use and in other areas, some trails may be closed (though general access throughout the Natural Areas would continue). Approximately 25 percent of the existing trails would be closed or relocated (54,000 linear feet would be closed as compared to 217,000 linear feet of existing or created trails). The trails that would be closed include social trails that are considered redundant and unsafe and trails that could otherwise protect sensitive species or habitat or prevent soil erosion, while also providing maintenance, trail contouring, improved access, and better signage. In most parks, there are areas for informal picnicking, relaxing, or nature discovery, whether on grass, in open areas, or on benches, depending on the activity. As described on Draft EIR p. 257, an improved trail system in Natural Areas could result in an increase in visitor use by making them more accessible to more types of users. Therefore, the proposed project would not result in large-scale restrictions on recreational access. A designated and improved trail system would likely reduce user conflicts because renovated trails would provide more space on trails and greater opportunities for passing areas. The impacts to recreation use and amenities associated with the No Project and Maximum Restoration Alternatives are discussed on Draft EIR pp. 469 and 484. The commenter provides no additional information to support the conclusion that impacts to recreation under the proposed project or these alternatives would result in significant impacts.

As further articulated in Response RE-1, RTC p. 4-311, there are ample off-leash DPAs and on-leash dog use areas that would continue to be available in San Francisco. Further, as also reflected in Response RE-1, RTC p. 4-311, approximately 870 acres (including Lake Merced) is available for on-leash dog use, unless other noted; these parks will not be subject to significant access restrictions or a large-scale denial of access.

The goals of the SNRAMP, as articulated on SNRAMP p. 2-2, are to provide opportunities for passive recreational uses compatible with conservation and restoration goals and to improve and develop a recreational trail system that provides the greatest amount of accessibility while still protecting natural resources. The project does not create new Natural Areas within the existing Natural Areas, but would increase the acreage devoted to maintaining and enhancing native and sensitive habitats (approximately 19.3 acres).

Because the commenters mention the large-scale denial of access when analyzing the "Project Alternative," it is assumed that the comment relates to the recreational impacts of the alternatives. The significance of recreation impacts for each of the alternatives is presented on Draft EIR pp. 477 to 527. A summary of the significance conclusions is provided on Draft EIR p. 525. This summary concludes that the proposed project and the Maximum Restoration alternatives would result in the same recreation impacts (potentially significant, but mitigable), whereas the No Project and the

Maximum Recreation alternatives would result in lesser recreation impacts (less than significant, with no mitigation required).

Comment RE-9 Impacts on recreation from planting threatened and endangered species

The response to Comment RE-9 addresses all or part of the following individual comments:

DogPACSF-1-18	GGHNA-1-04	SFDOG-2-18
SFFA-3-19	Bartolotta-1-17	Brown-1-15
Buckley-1-04	Dougherty-1-03	Form Letter-1-04
Ghosh-1-05	Jake-1-07	Moyer-1-04
Nelson-1-03	Pruitt-1-02	Yip-1-04
PH-Bowman-02		

- The NAP EIR does not adequately analyze the impacts on recreation of NAP plans to plant sensitive plant species (those that are listed as either endangered or threatened) throughout its natural areas. These plants, by virtue of their special status, trigger automatic federal and state protections, the primary one of which is severe restrictions on access to people and dogs. The NAP goal to preserve existing remnants of historical habitat does not require the planting of threatened and endangered species. There are plenty of native species that are not threatened or endangered that can be planted in San Francisco’s urban parks. Ecologists have noted that planting a few sensitive species plants does little to preserve the species. It is not an ecological decision; it is a landscaping decision. So why does NAP feel it should plant so many sensitive species when it knows their mere presence will “require” NAP to restrict access to its lands? The NAP EIR should consider the major negative impact on recreation that planting threatened and endangered species causes in its analysis of the Project Alternative and other alternatives. [DogPACSF-1-18] [Brown-1-15]
- The analysis does not adequately address impacts from introducing sensitive species into natural areas.

The NAP Management Plan calls for the re-introduction of sensitive species at Grandview and other parks. Because of their special status (threatened or endangered), these species, once planted, automatically trigger additional protections and restrictions, especially in access. The NAP EIR does not address the impacts on recreation of planting sensitive species in natural areas. It also does not address impacts on neighboring properties if sensitive species are planted. This is especially concerning in the parks in our neighborhood, where the natural areas control the entire park and where sensitive species could be planted immediately adjacent to a homeowner’s property. What will be the impact on these park neighbors if invasives from their backyards “threaten” the sensitive species? Will they be held liable in any way because of damage to the sensitive species? Will they be forced to cut down invasive plants on their own property? These impacts should be considered in the EIR. [GGHNA-1-04]
- The NAP EIR does not adequately analyze the impacts on recreation of NAP plans to plant sensitive plant species (those that are listed as either endangered or threatened) throughout

its natural areas. These plants, by virtue of their special status, trigger automatic federal and state protections, the primary one of which is severe restrictions on access to people (and dogs). The NAP goal to preserve existing remnants of historical habitat does not require the planting of threatened and endangered species. There are plenty of native species that are not threatened or endangered that can be planted in San Francisco's urban parks to give people a sense of what San Francisco's historical habitat was like. Ecologists have noted that planting a few sensitive species plants does little to preserve the species. It is not an ecological decision; it is a landscaping decision. So why does NAP feel it should plant so many sensitive species when it knows their mere presence will "require" NAP to restrict access to its lands? The NAP EIR should consider the major negative impact on recreation that planting threatened and endangered species causes in its analysis of the Project Alternative and other alternatives. [SFDOG-2-18]

- In the SNRAMP, NAP expresses its intent to plant threatened or endangered species throughout the natural areas, including many places where they are not currently found. The mere presence of these species triggers a number of additional protections and access restrictions required by the federal Endangered Species Act and similar state and local laws. The intentional planting of legally protected species where they are not currently found makes restrictions on recreational access (indeed all access) a *fait accompli*. Once the plant is in the ground or the animal is known to exist, it MUST be protected and recreational access MUST be restricted.

We have two specific examples of the consequences of reintroducing endangered species to our parks. In the case of Sharp Park, two endangered species of animal are known to exist. To our knowledge, these animals were not reintroduced by humans. The DEIR proposes to reconfigure the golf course to accommodate those legally protected species. The scale of that project is described in detail by the DEIR. We can't imagine how much this project will cost to implement. However, despite the scale of this monumental effort, San Francisco is being sued by organizations which do not believe that the proposed accommodations are adequate and therefore violate the Endangered Species Act. These organizations demand that the golf course be closed entirely and that all recreational access be confined to "viewing zones" behind fences. Essentially, they want the entire 411-acre park turned over to the two endangered species.

The effort of the Natural Areas Program to reintroduce the endangered Mission Blue butterfly to Twin Peaks is a more clear-cut example of the potential for the implementation of SNRAMP to eliminate recreational use of San Francisco's parks, because the butterfly did not exist there prior to the efforts of the Natural Areas Program to reintroduce it. In other words, the reintroduction was a discretionary act. The Natural Areas Program is willfully subjecting Twin Peaks to the potential to be closed to the public. The federal recovery plan for the Mission Blue previews these restrictions:

"Recreational impacts pose a substantial threat to mission blue butterfly habitat ... One of the contributing factors to the apparent extirpation of this butterfly on Twin Peaks is heavy recreational use by off-trail hikers, and motor-bike activity all of which are prohibited."¹

SNRAMPS informs us that the Natural Areas Program intends to reintroduce the endangered Mission Blue butterfly in McLaren Park and Bayview Hill. It is, however, silent about what recreational access restrictions may be required to support the population of a legally protected species.

In its section on Recreation (p. 252), the DEIR says that the Notice of Preparation Seeping process identified several concerns about recreation, including: "Effects of the introduction of endangered/threatened species on recreational opportunities, public access, and the administration of local public lands." Despite this acknowledgment, there is no discussion of impacts on recreation caused by intentional planting of sensitive species where they are not currently found.

The final EIR must acknowledge that the Natural Areas Program intends to reintroduce legally protected species of plants and animals to the Natural Areas. It must inform the public of what recreational access restrictions will be required to accommodate those species. When the loss of recreational access is anticipated, the final EIR must mitigate for those impacts by providing commensurate recreational opportunities in San Francisco.

Conclusion

The final Environmental Impact Report for the SNRAMPS must:

- > **Analyze the impacts on recreation and access resulting from the intentional planting or reintroduction of legally protected species of plants and animals in natural areas where they do not currently exist [SFFA-3-19]**
- The NAP EIR does not adequately analyze the impacts on recreation of NAP plans to plant sensitive plant species (those that are listed as either endangered or threatened) throughout its natural areas. These plants, by virtue of their special status, trigger automatic federal and state protections, the primary one of which is severe restrictions on access to people and dogs. The NAP goal to preserve existing remnants of historical habitat does not require the planting of threatened and endangered species. There are plenty of native species that are not threatened or endangered that can be planted in San Francisco's urban parks. Ecologists have noted that planting a few sensitive species does little to preserve the species. It is not an ecological decision; it is a landscaping decision. So why does NAP feel it should plant so many sensitive species when it knows their mere presence will "require" NAP to restrict access to its lands? The NAP EIR should consider the major negative impact on recreation that planting threatened and endangered species causes in its analysis of the Project Alternative and other alternatives. [Bartolotta-1-17]
- The NAP EIR does not consider impacts on recreation of NAP plans to plant threatened and endangered species throughout the natural areas. Because of their special status, these plants trigger automatic restrictions on access and, therefore, have much more negative impacts on recreation and access than planting native plants that are not threatened or endangered. [Buckley-1-04] [Form Letter-1-04] [Ghosh-1-05] [Yip-1-04]
- The NAP EIR fails to recognize the further restrictions on public access to areas planted with "native" and endangered species of plants. [Dougherty-1-03]

- The NARMP EIR does not adequately analyze the impacts on recreation of NARMP plans to plant sensitive plant species (those that are listed as either endangered or threatened) throughout its natural areas. [Jake-1-07]
- 4) The NAP EIR does not consider impacts on recreation of NAP plans to plant threatened and endangered species throughout the natural areas. Because of their special status, these plants trigger automatic restrictions on access and, therefore, have much more negative impacts on recreation and access than planting native plants that are not threatened or endangered. [Moyer-1-04]
- The NAP EIR fails to recognize the further restrictions on public access to areas planted with "native" and endangered species of plants. [Nelson-1-03]
- The SF Recreation and Parks Department should remove "Recreation" from its title if this plan goes forward. If restricted plants are planted and their areas then closed off for recreation, it seems this would not be under the mission of a city recreation and parks department but under a natural preservation zone. Such an area would not make sense to put in a densely populated city environment. [Pruitt-1-02]
- In addition, introducing new or expanding endangered species habitats will permanently hijack our small but precious recreational areas.

This plan doesn't take into consideration these future impacts on people or recreation. [PH-Bowman-02]

Response RE-9

These comments assert that the Draft EIR did not consider impacts on recreation (such as restrictions on access) as a result of planting sensitive plant species in locations where they do not currently exist.

While the proposed project would convert some areas of nonnative vegetation to native vegetation, some of which would be considered sensitive, it would do so in accordance with the SNRAMP's recreation goals, which include providing opportunities for passive recreation compatible with conservation and restoration goals, plus improving and developing a recreation trail system. The SNRAMP conservation and restoration goals focus on maintaining populations of special-status species; enhancing native plant and animal communities; enhancing local biodiversity, while also re-establishing native community diversity, structure, and ecosystem function where degraded; and decreasing the extent of invasive exotic species cover. The designation of portions of Natural Areas as MA-1 and MA-2 would not restrict recreational access; in fact, trails that currently allow recreational access and on-leash dog use throughout the Natural Areas, including MA-1 and MA-2 areas, and in all other areas, unless noted otherwise (such as within athletic fields and courts, children's play areas, and sensitive habitat areas), would continue to be provided. In order to have a significant impact on recreational resources, as stated on Draft EIR p. 255, the project would require a physical deterioration of facilities to be substantial or accelerated; the construction or expansion of recreation facilities that might have an adverse physical effect on the environment; or a physical

degradation of existing recreation resources. Given that none of these conditions would occur, as concluded on Draft EIR pp. 256 to 261, the restoration, enhancement, and introduction of sensitive plant species would not have a substantial adverse impact on recreational resources. Refer also to Response PD-11, RTC p. 4-159, for a discussion of the benefits of increasing biodiversity in the Natural Areas.

Refer to Response G-19, RTC p. 4-88, and Response PD-23, RTC p. 4-198, for a detailed discussion of on-leash and off-leash dog opportunities throughout the city; Response RE-1, RTC p. 4-311, and Response RE-13, RTC p. 4-347, for a discussion of the Draft EIR's conclusions regarding recreational impacts; Response G-25, RTC p. 4-106, for a discussion of the impacts of dogs on wildlife and sensitive habitats; and the following responses for a discussion of the no project, maintenance, and maximum restoration alternatives: Response AL-1, RTC p. 4-562; Response AL-2, RTC p. 4-563; Response AL-3, RTC p. 4-565; Response AL-4, RTC p. 4-566; Response AL-5, RTC p. 4-568; Response AL-7, RTC p. 4-572; Response AL-8, RTC p. 4-585; and Response AL-9, RTC p. 4-587.

Comment RE-10 Recreational analysis related to trails

The response to Comment RE-10 addresses all or part of the following individual comments:

SFFA-3-15	SFFA-3-16	SFFA-3-18
WTPCC-1-07	Bartolotta-1-18	Borden-1-03
Borden-1-05	Bowman-2-08	

- As acknowledged in the DEIR, a 2004 Recreation Assessment conducted for the Recreation and Park Department reported that the number one recreational facility need was more trails. Of the residents surveyed, 67% reported participating in walking or running, the highest percentage for any of the 26 activities listed in the Assessment. People want more trails, not less.

According to RPD General Manager Phil Ginsburg, the majority of trails in San Francisco city parks are located in the natural areas controlled by NAP (private conversation, June 1, 2012; he said this when asked to explain why the "trail restoration" part of the 2008 Clean and Safe Neighborhood Parks Bond was restricted to trails in natural areas). Thus, the SNRAMP's proposed closure of 23% of the total length of trails in natural areas marks a significant decrease in the length of trails available to the public systemwide, not just in the natural areas. There is simply not enough trail mileage in non-NAP parks to adequately replace the mileage lost in the natural areas. Thus the trail closures will have a more significant negative impact on the majority of San Franciscans who want more trails on which to walk or run. This aspect of the trail closures was not mentioned in the DEIR.

By closing off the areas currently accessed by the trails that will be closed, the SNRAMP will reduce the variety of experiences park users can have (fewer different areas to see). With less mileage available to walk, the closures will also discourage people from taking longer walks. Neither of these impacts was considered in the DEIR.

Many, if not most, of the trails scheduled for closure are “social trails,” trails created by park users, not by park staff. There is usually a reason people create social trails; they prefer to take a more direct, faster, or more scenic path from Point A to Point B than the path RPD staff have told them they should take. Frequent visitors are the ones who create social trails by walking off an official trail time and time again. People new to a park will likely stay on official trails; they don’t know where else to go. The closure of social trails will therefore have a greater impact on people who walk frequently in the parks, degrading their experience of the park by forcing them to walk in places they clearly would rather not.

When the University of California at Santa Cruz opened in the 1960s, administrators paved few paths between the colleges. They chose to wait to see what paths the students “naturally” created on their own to get from one place to another, and then paved the social trails that resulted. The social trails became the official trails. NAP has taken the opposite approach, deciding where people will be allowed to walk with little, if any, public input. And when the public has expressed a desire for something different than what NAP wants (by voting with their feet and creating a social trail), the response is to destroy the social trail. NAP is working at cross-purposes to the majority of San Franciscans who want more trails, and who try to show NAP where they want those trails to be when they create social trails.

Social trails also spring up when people want to enter or leave a park at a location where there is no “official” trail that will allow them do so. For example, over the years, people created a social trail at the northwestern corner of Grandview Park. The only “official” park access comes from trails on the eastern and southern sides of the park. To get to the official trails, people living on the north and western sides of the park are forced to walk in the street that surrounds the park, an option they clearly didn’t like since they created a trail to the top of Grandview that began in the park’s northwest corner. The recent closure of the social trail at Grandview by NAP has made it harder for the people who live north and west of the park to access it. The DEIR did not address the loss of accessibility to parks by the closures of some social trails.

Erosion can be a problem with social trails, but the response should be to mitigate erosion where it occurs, not to close the trail. The DEIR did not consider mitigations to these erosion problems other than closure.

Conclusion

The final Environmental Impact Report for the SNRAMP must:

- > **Analyze the impacts on recreation of confining all recreation to trails, as well as the closure of trails in natural areas** [SFFA-3-15]
- Natural Areas desire to close narrow social trails is misguided. (page 256 DEIR) The narrow foot tread social trails are generally sustainable from an erosion viewpoint and those that exist are the result of a long evolutionary process. Granted, they are unsafe when compared to a smooth paved trail in Golden Gate Park, but tame compared to any trail in the Sierra Nevada. The web of social trails offers up a much more engaging outdoor experience than the “channelized” trails the NAP has in store for us. For the same square footage of

disturbed surface, the narrow social trails can accommodate many more users having their own nature experience than the broad bland trails envisioned. The closure of these social trails will have much more than a “less than significant impact”. [Borden-1-03]

- Natural Areas singles out bicycle riders as a problem. However, the insistence that people not be allowed to ride bicycles on trails in Natural Areas is not based on any sound logic. Cyclists are much more likely to stay on trail than pedestrians. When people stay on trail, no damage is done to the sensitive habitat the trail runs through. (There are trails in Glen Canyon where bicycle use is inappropriate due to heavy use by hikers and dog walkers, combined with trails that are marginally sustainable.) [Borden-1-05]
- The DEIR does not address the impacts on recreation and visitor experience of being restricted to the trails in the natural areas. Being restricted to trails prevents many different types of recreation. Visitors can't spread a blanket on the ground and have a picnic or sunbathe while reading a book. Families can't play ball or Frisbee, fly a kite or a model airplane on a trail. Being confined to a trail essentially prohibits many other forms of recreation. Signs have been erected in the natural areas to inform the public that they are confined to the trails. The DEIR makes no mention of this policy or the restrictions it imposes on the recreational preferences of park visitors.

Fences have been erected by NAP alongside trails to enforce this restriction. With fences in place on either side of a trail, a child is physically prevented from exploring plants and bugs on the ground just off of the trail, or following a butterfly or moving to see the bird she can hear calling. Fences, no matter how attractive they are, create a “look, Don't Touch” museum-like feel to the park. That is not what most people want in their neighborhood parks.

Where trails have recently been “restored” in natural areas, NAP has erected fences on both sides of the trail, to force people to stay on the trails. These recently completed projects are a preview of the fences that the public can expect to be installed in all the natural areas as SNRAMP is implemented over its 20-year lifespan.

These are not temporary fences. They will remain in place to keep people from straying off the trail for years to come. Putting a fence on both sides of a trail creates a “cattle chute” feeling that many people find unappealing. Their park experience is seriously degraded by the presence of these fences. The DEIR does not address the issue of impacts of permanent or semi-permanent fences on recreation, nor does it address the impact on visitor experience of creating “cattle chute” trails in neighborhood parks.

When all recreational users are confined to a trail, it creates unnecessary conflicts between different user groups. When joggers, dogs being walked on 6' leashes (as allowed by law), bicycles, birders seeking quiet, are all confined to the small space of a fenced trail, conflicts are inevitable. These conflicts are mitigated, if not avoided altogether, by giving people the option of stepping off the trail to accommodate other park visitors. **Of all the negative impacts of the Natural Areas Program, perhaps the most devastating has been the increased conflicts it has caused in our parks. Park visitors who have co-existed in peace**

for generations are now pointing fingers at one another, blaming one another for the loss of their recreational liberty. [SFFA-3-16]

- **The final EIR must acknowledge the SNRAMP policy to confine all recreational access in the natural areas to fenced trails. This restriction has a significant impact on recreation in the parks of San Francisco and it should be recognized as such by the final EIR.**

In over half of the parks with natural areas (17 of 3 listed in Table 5 of the DEIR), NAP controls the entire park. Entire parks have become essentially single-use parks- natural areas only. In an additional 10 parks, NAP controls over 50% of the park. In only four parks does NAP control less than half of the park.

For those parks in which NAP controls the entire park, there are no recreational uses allowed in the entire park other than walking on a trail (Bernal Hill is the one exception, with off-leash dog walking allowed in the nearly half of the park that is designated as MA-3). Parents hoping to play catch with their child must find another park in which to do so. People wanting to sit on a blanket in the sun must go somewhere else. When you add in the parks with more than half of their land controlled by NAP, 87.5% of parks with natural areas in them will have significant restrictions on access and recreation. The final EIR must consider this impact on recreation and access.

Within all the natural areas, more than half of the land (57%) is designated as MA-1 or MA-2. These are the management zones with the most severe restrictions on recreation. In 7 parks, all of the land in the natural area is designated as MA-1 or MA-2. These parks will see even more significant impacts on access and recreation than parks with at least some of their land designated as MA-3. Recreation restrictions from different management zones, and how much of a park is made up of each zone, must be considered in the final EIR.

In some cases, the parks completely controlled by NAP do not have non-NAP parks close by. Thus people who want a non-NAP park experience (for example, to play catch with their children, friends or pets) will be forced to go to another park outside of their neighborhood. This will force many into their cars to drive to a non-NAP park. This increase in automobile usage and its attendant increases in pollution and global warming effects are not addressed in the DEIR.

Conclusion

The final Environmental Impact Report for the SNRAMP must:

- > **Analyze the impact of restricting all recreational access to trails enforced by fences on recreation and aesthetics, especially erecting fences on both sides of trails, as well as impacts from the removal of benches in natural areas**
- > **Analyze impacts on recreation and access resulting from the designation of entire parks as natural areas with consequent impacts on recreation and aesthetics**
- > **Analyze the maximum possible closures of all DPAs in natural areas (80%), not just the minimum possible (16.4%), and provide evidence of impacts claimed to be caused by dogs [SFFA-3-18]**

- WTPCC opposes NAP plans to restrict access to parks. NAP plans to close 9.2 miles of trails that thread through its natural areas. At our May meeting, Dennis Kern noted that a citywide survey of what San Franciscans want in their parks identified trails and hiking as the number one need. Yet NAP plans to close nearly a quarter of the total length of trails in natural areas (about 40 miles). This would seem to fly directly in the face of what the public said they want in their park.

In most natural areas, the only thing you can do is walk on a trail. You cannot leave the trail to explore the area, or follow a butterfly, or try to see the bird you hear tweeting. To control access, NAP builds fences. Indeed, in parks where trails in natural areas have been restored recently, fences have been built on either side of the trail to ensure people cannot leave the trail. Natural areas become places where you can “look but not touch.” How can children explore the wonders of nature if they are told repeatedly they must “Stay on the Trail”? This is not what we want for our parks.

When people are restricted to walking only on trails, they lose access to the entire non-trail part of the park. In over half of the parks with a natural area (17 of 31), NAP controls the entire park. That means people have lost access to all but the trails in those parks. In an additional 10 parks, NAP controls over 50% of the land. Put another way, only four of the 31 parks with natural areas have less than 50% of their land controlled by NAP. Access restrictions planned by NAP (“stay on the trail”, fences, and closure of trails) mean that entire neighborhoods will lose access to the vast majority of the parkland in their neighborhood parks. The Draft DEIR does not consider the impacts on neighbors and park users of this level of access restriction in the 27 parks where NAP controls more than half the land. [WTPCC-1-07]

- The NAP EIR does not consider impacts on recreation and land use from the fact that NAP controls the entire park in over half of the parks (18 of 32) where there is a natural area. No other recreational use is possible in those parks. In an additional 10 parks, NAP controls over 50% of the land. Only four of the 32 parks with natural areas have less than 50% of their land controlled by the NAP. A majority of land under NAP control citywide (57%) will have significant restrictions to access by all people (not just people with dogs); that is the amount of land designated as MA-1 and MA-2. In 8 parks, all of the land in the natural area are designated as MA-1 and MA-2, with resulting significant restrictions on access to everyone. In some cases, this denial of access will be in the only park within easy walking distance in the neighborhood. The NAP EIR must consider this large-scale denial of access when analyzing the Project Alternative. [Bartolotta-1-18]

- **Section 2: Table I - Summary of Environmental Effects - Recreation**

Change all recreation environmental impact statements to Significant for Proposed Project, Maximum Restoration and No Project to reflect the significance of the proposed plan and the current Natural Areas Program management on park visitors. Consider Conducting an unbiased survey of Natural Areas visitors to determine the significance of decommissioning trails, removing park greenery (aka Trees, ivy, etc.), restricting visitors

to trails, removing park benches, closing dog play areas, spraying herbicides, etc. on visitor experience and use of the parks.

Proposed Plan, Maximum Restoration, and the No Project alternatives impact ratings for Recreation need to be changed to “Significant” to reflect the high value that residents place on trails and visiting nature and the significant change in people’s recreational access to the land that is proposed. By decommissioning existing trails, installing fences, removing benches, and requiring visitors to stay on the trail, SNRAMP does the opposite of improving these highly valued facilities and encouraging visitation to parks and represents a significant negative environmental impact to recreational activities in the park and this is not fully recognized or analyzed in the DEIR.

According to the 2004 Rec & Park Assessment Survey, 67% of households run or walk in parks and 61% visit nature plus 55% of residents consider walking and biking trails to be one of the most important recreational facilities. Trails were by a wide margin the most important recreation facility according to the survey. Running, walking, and enjoying nature are also low cost options for all residents to combat public health issues such as obesity, diabetes, heart disease, mental health issues, etc., and restricting access discourages residents from fully using parks to promote health and well-being. Any analysis that assumes the SNRAMP plan does not have a significant impact of recreation needs to be supported by unbiased evidence such as an independent survey. Note that public hearing are not sufficient as RPD has a reputation for filtering public input to only present the information that supports RPD’s current position.

In addition, freedom to play in parks promote children engaging with the outdoors and also provides health benefits as summarized by the National Wildlife Federation: <http://www.nwf.org/News-and-Magazines/Media-Center/News-by-Topic/Get-Outside/2012/04-12-12-Getting-the-Dirt-on-Dirt-for-Healthier-Happier-Children.aspx>. See *Appendix D*.

In addition to decommissioning trails, the Natural Areas’ Sensitive and Important Habitat signs requiring people to “Stay on the Designated Trail” have already been posted at the entrances of Natural Areas which indicates that these rules apply to even the highly resilient forest and grassland areas and significantly alters the recreation land use of all Natural Area zones.

In addition, rows of fencing have already been installed in the Natural Areas which restrain people from using park areas and also mar the park aesthetics. See *Appendix E* with pictures of unattractive fencing that mars the beauty and views of the Natural Areas. The fencing that runs the length of the Sharp Park berm has a large number of holes in the fence which illustrate that the public wants to use these areas and trails for recreation where the Natural Areas Program is attempting to bar access. My understanding is also that the transfer of the property to the City of San Francisco stipulates that these areas are for recreation and converting these park areas to habitat conservation zoning does not comply with that stipulation.

Examples of significant SNRAMP conservation focused recommendations that will have a significant degrade the recreational land use of the Natural Areas include:

GR-11a: plan recommends re-routing or closing 10.3 miles of trail (approximately 26 percent of total existing trails).

GR-11c: Public use in all Natural Areas, unless otherwise specified, should encourage on-trail use. To reduce the deleterious effects of trampling in unstable areas, formal use areas, including designated trails, shall be created at locations that are sufficiently stable to withstand the pressure of public use (see GR-11a). Additionally, interpretive and park signs should be installed or modified as appropriate to include "Please Stay on Trails" with information about why on-trail use is required.

GR-11d: Natural Areas shall be monitored on a routine basis for the development of new social trails. Those that impact sensitive species or sensitive habitats or that contribute to erosion problems shall be closed or re-routed (see GR-11b) with signs and brush barriers. Temporary fencing will be used as a last resort in these areas if less obtrusive measure (signs, brush barriers) are not effective.

Closing trails and access not only impacts children exploration and enjoyment. I visit Sharp Park often and the lagoon was the equivalent of our 18th hole on our hiking trips that I miss deeply. I'm obviously not the only one as the fence along the berm is riddled with holes made by individuals that obviously believe as I do visiting the lagoon is a significant recreational activity. The ugly fence also diminishes the aesthetic of the golf course for those walking on the berm and creates an exclusionary atmosphere where before it felt as if the golf course was for everyone.

Rec & Park seems to believe that creating "volunteer" stewardship programs in some way replaces or compensates for the millions of self-guided visits each year that residents make to these parks. While volunteering is important for many reasons, it does not replace personal, daily interactions with nature in the parks, plus the Natural Areas Program is alienating large segments of daily park users, thus reducing these users willingness to participate in volunteer programs or support Rec & Park. With more than 800,000 residents, the FY 2009-2010 volunteer hours of 129,703 of habitat restoration, gardening and recreation program support represents a minor element of people's recreational use of the park. In addition, the volunteer habitat restoration projects are in some cases assisting with decommissioning recreational access to the parks. It is also concerning that RPD is directing most volunteer hours to native plant gardening and few hours to other park maintenance needs.

Rec & Park recently used volunteers to create lovely new trails in the Corona Heights forest and re-opened a historic trail in the Interior Greenbelt forest and both are popular with residents. However, these trails do not compensate for the social trails to be closed in other Natural Areas or the intense "sensitive habitat" controls planned and both trails could easily have been created under the recreation or maintenance alternative. Both these trails indicate that residents appreciate having trails through forests and there are few such opportunities in San Francisco and SNRAMP's restoration and conservation objectives minimize the

opportunity for creating more such highly valued trails through forests to meet the needs of residents. [Bowman-2-08]

Response RE-10

These comments questioned the impacts caused by the closure of trails in the Natural Areas and request that the Draft EIR analyze the impacts of confining recreation activities to trails.

As stated on SNRAMP pp. 3-14 and 3-15, the existing trail network was surveyed for each site as part of the development of site-specific plans (refer to Table 3-6 of the SNRAMP). All trails, pathways, roads, boardwalks, and stairs were surveyed and mapped. Earthen trails were categorized into one of three types: primary, secondary, and social.

A primary trail has been officially designated as a main route into a Natural Area from large neighborhoods, main roadways, or parking areas. Often, primary trails are the designated formal entrances to a Natural Area that receive the greatest amount of foot traffic and typically are routed through points of interest (e.g., high points, viewing areas, connections to other trails). Primary trails would be maintained and improved as necessary. Approximately 91,000 feet (17.2 miles) of primary trails exist within the Natural Areas.

Secondary trails are also officially designated, but receive a moderate amount of foot traffic. These may or may not be improved or maintained depending on the trail and resources that a secondary trail may affect. Similar to primary trails, secondary trails provide main routes through Natural Areas and to points of interest. However, they may be the entrance from a smaller neighborhood or an informal entrance. Often they branch off of a primary trail and provide access to secondary Natural Area amenities. There are about 66,000 feet (12.5 miles) of secondary trails within the Natural Areas.

Social trails are undesignated pathways that have developed through use of a Natural Area. These are all undesignated trails and candidates for closure, rerouting, or formalization depending on their location, resources affected, and level of use. Social trails often result in impacts to sensitive resources, primarily because vegetation is trampled. Also, erosion problems rapidly develop following destruction of vegetation, which is often exacerbated by the orientation of the trail itself, as many social trails run straight up and down steep slopes, perpendicular to the slope contours. Social trails sometimes provide access to areas where unsanctioned activities occur (rock climbing, camping, etc.) and do not typically connect to points of interest or Natural Area amenities. Other times, social trails are simply redundant trails leading to the same destination. At the time trails data were collected for the SNRAMP, about 54,400 feet (10.3 miles) of social trails existed within the Natural Areas.

Impact RE-1, Draft EIR pp. 256 to 257, addresses the potential effects of trail closures on recreational resources and access. Of a total of 211,303 feet (or 40 miles) of trails, as a programmatic project, the SNRAMP calls for closing approximately 54,400 feet (10.3 miles, or 26 percent) of social trails,

creating 5,897 feet (1.1 miles) of new primary and/or secondary trails, and improving existing, primary trails to provide a more manageable trail system with greater access and easier navigation through the parks. Trail closures would focus primarily on eliminating social trails because they are considered unsafe for visitors; to protect sensitive species or habitat; or to prevent soil erosion. The improvement (e.g., maintenance, trail contouring, improved access, and better signage) and creation of new trails in the Natural Areas would continue to be focused on primary and/or secondary trails. Access to and within the Natural Areas would remain, allowing for continued use of the Natural Areas for passive recreation opportunities, and the trails that would remain would be improved and rerouted to provide better access.

The Draft EIR (in Impact RE-1) determined that the closure of social trails that are unsafe or in sensitive habitat areas would have a less-than-significant impact on recreational resources because general access would remain unimpeded; new trails would be created; the maintenance and improvement of existing primary trails under the SNRAMP would provide a more manageable trail system with greater access and easier navigation through the parks; and these improvements are expected to increase visitor use and improve access to the parks for more types of users. A designated and improved trail system would likely reduce user conflicts because renovated trails would provide more space on trails and greater opportunities for passing areas. Therefore, it is unlikely that closing social trails in Natural Areas would substantially increase the use of other recreational facilities to an extent that would result in substantial deterioration or the acceleration of deteriorating conditions at those facilities.

As articulated on SNRAMP p. 2-2, some of the express goals of the SNRAMP are to provide opportunities for passive recreational uses compatible with conservation and restoration goals and to improve and develop a recreational trail system that provides the greatest amount of accessibility, while still protecting natural resources. Similarly, as identified on Draft EIR p. 86, the objectives and goals of the project include providing opportunities for passive recreation, such as hiking and nature observation, and development of a recreation trail system that provides the greatest amount of accessibility while protecting natural resources.

A commenter objected to the closure of approximately 9.2 miles of trails, indicating that San Franciscans most desire trails based upon a citywide survey. To be accurate, according to Draft EIR Table 5, approximately 10.3 miles of trails would be closed (approximately 54,400 linear feet, or 10.3 miles), not including the 1.1 miles of new trails that would be created. As shown in Table 3-6 of the SNRAMP, over 29 miles of dedicated trails would remain in the Natural Areas after implementation of the SNRAMP. The SNRAMP seeks to balance increased biodiversity with the needs of local residents in order to provide recreational opportunities; therefore, for the reasons articulated earlier in this response, the loss of 10.3 miles of trails is considered to be a less-than-significant impact, as reflected on Draft EIR pp. 257 to 258. The commenter provides no support for the assertion that “the closure of social trails will have much more than a less-than-significant impact.”

The SNRAMP does not single out bicyclists as a concern and does not include actions directed specifically at bicycle use. Off-road bicyclists would be affected by proposed trail closures similarly to other trail users, such as hikers and runners.

In responding to these comments, it is important to note that the purpose of the EIR is to identify potentially significant impacts of the proposed project on the physical environment and that, as stated in CEQA Guidelines Section 15131(a), “social effects of a project shall not be treated as significant effects on the environment.” Refer also to Response G-26, RTC p. 4-114, for a more detailed discussion as to how social effects can be considered in an EIR.

One of the commenters expresses a preference for narrow social trails, which speaks to the merits of the proposed project and not to the accuracy or adequacy of the Draft EIR.

With respect to one of the commenter’s concern about the aesthetic impact of restricting all recreational access to trails by fences, the SNRAMP does not propose restricting access to trails with fencing. Rather, fencing would only be required to protect visitor safety and habitat. Typically, the type of permanent fencing that typically would be used is a three-foot high rustic split -rail fence. Installation of these fences, where required, would not result in a substantial demonstrable negative change to the aesthetic conditions, as discussed on Draft EIR pp. 191 to 195. The text on Draft EIR p. 195 (following the second full paragraph) has been changed to clarify the impact that fences may have on aesthetics, as follows:

Three-foot-high post-and-rail fences would be installed in some Natural Areas as required to protect human health and safety, reduce soil loss, protect water quality, and conserve habitat.

Refer to Response RE-13, RTC p. 4-347, for a discussion of the acreage of DPAs that are proposed to be closed and potential impacts on the recreational capacity of remaining DPAs; refer to Response RE-8, RTC p. 4-324, for a discussion of access restrictions in the MA-1 and MA-2 areas; refer to Response PD-2, RTC p. 4-122, and Response PD-23, RTC p. 4-198, for a discussion of the use of fencing as a last resort to restrict access to sensitive biological areas in the Natural Areas; refer to Response AE-4, RTC p. 4-226, for a discussion of the use of fencing at Sharp Park to restrict access to sensitive biological areas; refer to Response G-25, RTC p. 4-106, for a discussion of dog impacts related to erosion; refer to Response G-26, RTC p. 4-114, for a discussion of social impacts related to dogs and dog ownership; and refer to Response PD-11, RTC p. 4-159, for a discussion of the importance of re-establishing native habitats to improve biodiversity.

Also, the impacts to recreation use and amenities associated with the No Project and Maximum Restoration Alternatives are discussed on Draft EIR pp. 469 and 484. The commenter provides no additional information to support the conclusion that impacts to recreation under the alternatives would be significant.

Comment RE-11 Impacts of removing benches and recreational amenities
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The response to Comment RE-11 addresses all or part of the following individual comments:

MPIC-1-13

SFFA-3-17

- The DEIR also does not address the negative impact on Park visitors of prohibiting benches in scenic view areas within the MA-1 sector in order to deter off-leash dogs. The DEIR does not assess how leash rules could be effectively enforced or that, instead of pursuing such enforcement, City staff are choosing to remove recreational amenities such as benches in sensitive plant areas. This policy significantly negatively impacts recreational experience of one of the best views in San Francisco. There is now only one bench in Mt. Davidson Park, and for full enjoyment by recreational users additional benches should be installed throughout the Park. [MPIC-1-13]
- NAP has a history of removing benches from areas under its control. For example, a bench on an overlook at Mt. Davidson, one of only two benches in the park, was recently removed by NAP. There was nothing wrong with this bench. It was apparently removed because it was perceived by NAP staff to be detrimental to the native plants that grow in that area. There is now no place to sit (except on the ground) to either rest or reflect while looking at the view. This is a particular hardship for seniors and others with more limited mobility, who now have no place to sit after a strenuous uphill hike. Despite park neighbors' and users' pleas to replace the bench, NAP has so far refused to do so. The lack of benches or places for people to rest without having to sit on the ground impacts all recreational users of the parks, even those who only want to walk on trails. [SFFA-3-17]

Response RE-11

These comments refer to prohibition of new benches and the removal of a bench at Mt. Davidson Park.

In 2011, SFRPD removed a bench on the northern portion of Mt. Davidson because it was rotting and unsafe for sitting. In late 2012, SFRPD installed a replacement bench close to where the unsafe bench had been located. The SNRAMP would not prohibit benches in scenic view areas within MA-1 designated areas or elsewhere. Furthermore, new benches are and would continue to be installed in Natural Areas on a site-by-site basis. No specific environmental issues about the adequacy or accuracy of the Draft EIR's coverage of environmental impacts are presented in the comments above.

Comment RE-12 SNRAMP proposals for park access
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The response to Comment RE-12 addresses all or part of the following individual comment:

MPIC-2-21

- Which trails will be closed and how dog access will be limited in the park are not clearly stated in the SNRAMP, and are therefore inadequately evaluated in the DEIR. The EIR

should answer these questions so the public can truly be informed as to the impact of these plans on recreation. [MPIC-2-21]

Response RE-12

This comment requests an identification of the trails that would be closed and how dog access would be limited.

Draft EIR Table 5 (presented on p. 114) shows the feet of existing trails by Natural Area site; the feet of trails that would be closed or relocated; the feet of trails that would be created; and the resulting feet of trails. The specific trails within each Natural Area site that would be closed or relocated and the location of the trails that would be created are identified in the SNRAMP in figures titled "Soils, Land Features, and Trails"; a figure is provided for each Natural Area site.

Impact RE-1, Draft EIR pp. 256 to 257, addresses the potential effects of trail closures on recreational resources and access. Of a total of 211,303 feet (or 40 miles) of trails, as a programmatic project, the SNRAMP calls for closing approximately 54,400 feet (10.3 miles) of social trails, creating 5,897 feet (1.1 miles) of new trails and improving existing, primary trails to provide a more manageable trail system with greater access and easier navigation through the parks. Social trails are trails that have not been officially designated and are usually created by users, while primary trails are those officially designated as main routes into a Natural Area from large neighborhoods, main roadways, or parking areas. Trail closures would focus primarily on eliminating social trails because they are considered unsafe, to protect sensitive species or habitat, or to prevent soil erosion. The Draft EIR determines that closure of social trails that are unsafe or in sensitive habitat areas is not expected to have a significant adverse impact on recreational resources because general access would remain unimpeded; the creation of new trails and the maintenance and improvement of existing primary trails under the SNRAMP would provide a more manageable trail system with greater access and easier navigation through the parks; and these improvements are expected to increase visitor use and improve access to the parks for more types of users.

As addressed in more detail in Response G-25, RTC p. 4-106, the SNRAMP proposes to restrict dogs from only three sensitive habitat areas: Bernal Hill (reduce the 21-acre DPA by six acres), Lake Merced (close the 5-acre DPA), and McLaren Park (reduce the 61.7-acre DPA by 8.3 acres). Dog access to certain waterbodies would also be prohibited, such as in Pine Lake and in Gray Fox Creek within McLaren Park. Within Pine Lake, while dogs would not be allowed in the lake itself, dogs are permitted on leash within the remaining portions of the Pine Lake Natural Area. With regard to Gray Fox Creek (within McLaren Park), the SNRAMP would eliminate dog access to a 0.6-acre portion of Gray Fox Creek and convert a 7.7-acre area around the creek to an on-leash on-trail use area to protect sensitive habitat. This would affect a total of 8.3 acres of this 61.7-acre Natural Area, which represents the entirety of the change proposed for McLaren Park. While dog access to certain waterbodies would be prohibited, dogs are permitted on leash at all SFRPD parks. In fact, within the 31 parks that contain Natural Areas within San Francisco and at Sharp Park, there are a total of

approximately 2,724 acres of parkland that would be available for on-leash dog use (refer to Table 5 of the Draft EIR), and additional park acreage is available at other parks throughout the city.

The EIR concludes that the proposed closure and reduction of DPAs would not result in significant impacts to recreational resources (Impact RE-1 on Draft EIR pp. 257 and 258). However, when combined with impacts resulting from the GGNRA Dog Management Plan, the EIR conservatively determines that the cumulative impact of these two projects could accelerate the physical deterioration of those DPAs and the Natural Areas in general (Impact RE-7 on Draft EIR pp. 261 to 262; Impact RE-7 was further clarified and expanded in Response RE-2, RTC p. 4-313). With respect to increased use of the Natural Areas by visitors, the EIR finds impacts to recreational resources to be less than significant (Impact RE-1, Impact RE-4, and Impact RE-7). Therefore, the proposed actions are adequately detailed in the SNRAMP and EIR and the environmental impacts of the proposed actions have been adequately addressed.

Comment RE-13 Effect of the reduction of DPAs on other DPAs in terms of recreational capacity

The response to Comment RE-13 addresses all or part of the following individual comments:

NPS-1-08	CFDG-1-05	DogPACSF-1-06
SFDOG-1-05	SFDOG-2-07	SFFA-3-20
Bartolotta-1-06	Bowman-1-06	Brown-1-03
Buckley-1-03	Carrington-1-02	Chambers-1-03
Donovan-1-03	Fitzer-1-02	Form Letter-1-02
Form Letter-1-19	Garber-1-04	Ghosh-1-03
Gordon-1-02	Kelly-1-03	Moyer-1-02
Naima-1-04	Popoff-1-03	Smith-1-02
Summer-1-02	Winquist-1-02	Yip-1-02
PH-Noetzel-01	PH-Stephens-06	

- Pg. 262, 346, 440 – Has any data been gathered to support the impacts on other DPAs and adjacent lands due to the proposed reductions of DPAs, together with the actions proposed in the draft GGNRA Dog Management Plan? If so, it would be helpful to share this information with GGNRA.

Pg's 470, 484, 498: GGNRA would appreciate receiving any data that documents how implementation of the GGNRA Dog Management Plan would result in significant and unavoidable impacts from deterioration of the DPAs. [NPS-1-08]

- The EIR considers only the closures of 15% of total off-leash space when determining impacts on remaining DPAs and recreation. Because the NAP plan puts 80% of off-leash space at risk of closure in the future, this EIR must also consider the impacts of this much larger closure on remaining DPAs and on recreation. [CFDG-1-05] [Chambers-1-03]
- The NAP EIR considers only the NAP plans to close 15% of the legal off-leash space in SF city parks when considering impacts on the remaining DPAs and on recreation. However,

the NAP plan also calls for expanding the most sensitive areas within natural areas, and this potentially could result in the closure of significantly more DPAs (up to 80% of the total off-leash space currently available in city parks, off-leash space that is located either within or adjacent to a natural area). These added closures (up to 80%) will significantly increase the impacts on recreation, on people with dogs, and on the remaining DPAs. These increased impacts were not considered in the EIR when it evaluated the Project Alternative, and without them, the analysis of the Project Alternative is incomplete and inadequate. [DogPACSF-1-06] [Brown-1-03]

- This is particularly important with the Maximum Restoration Alternative that will essentially close DPAs at McLaren Park, Bernal Hill, Buena Vista Park, and Lake Merced. These DPAs constitute roughly 75% of the total legal off-leash area in SF city parks. The EIR does not adequately analyze the impact of that level of closure on the remaining DPAs and other nearby parks, especially when combined with the Golden Gate National Recreation Area's plan to close 90% of its off-leash space. [SFDOG-1-05] [PH-Stephens-06]
- The NAP EIR considers only the NAP plans to close roughly 15% of the legal off-leash space in SF city parks (closure of Lake Merced DPA and reductions in DPAs at McLaren Park and Bernal Hill) when considering impacts on the remaining DPAs and on recreation. However, the NAP plan also calls for expanding the most sensitive areas within natural areas, and monitoring the DPAs in four parks - McLaren and Buena Vista parks, Bernal Hill, and the Golden Gate Park Oak Woodlands - to look for any impacts from dogs on the natural areas in these parks. These DPAs, combined with the one at Lake Merced that will be closed by NAP and DPAs at Pine Lake and Corona Heights that are located immediately adjacent to a natural area), constitute roughly 80% of the total off-leash area in SF city parks. Therefore, NAP claims of impacts from dogs could result in the closure of up to 80% of the legal off-leash space in city parks. These added closures will significantly increase the impacts on recreation, on people with dogs, and on the remaining DPAs. These increased impacts from the loss of 80% of legal off-leash space were not considered in the EIR when it evaluated the Project Alternative, and without them, the analysis of the Project Alternative is incomplete and inadequate. All analyses of impacts on recreation, transportation, global warming, and climate change (from increased driving because of DPA closures) must be done using the 80% loss that is quite possible, given NAP's historic antipathy toward dogs and dog walkers. [SFDOG-2-07]
- The NAP EIR says that the impact of people driving to other parks to walk their dogs because of the immediate closures of the roughly 15% of the total off-leash space in city parks (at Lake Merced, Bernal Hill, and McLaren Park) will be less than significant because there will remain sufficient offleash space in those parks (except for Lake Merced, which will be completely closed). However, the EIR does not consider the impact of people driving to other parks if 80% of the legal off-leash space in city parks is eventually closed because NAP claims impacts from dogs (80% of the total off-leash areas in city parks are located either within or adjacent to natural areas). This must be included in the analysis of the Project Alternative, and will likely show a much more significant impact than what the EIR now shows. The DEIR does not adequately consider impacts on off-leash recreation from the

SNRAMP. The DEIR addresses only the impacts on remaining DPAs, and on recreation, of the immediate closure of 16.4% of the total legal off-leash space in city parks once the SNRAMP goes into effect. However, the DEIR concludes that impacts of these closures on remaining DPAs, recreation, people driving to other DPAs, etc., will be minimal.

The SNRAMP makes clear that NAP will monitor DPAs in four parks- McLaren, Buena Vista, Bernal Hill, and the Golden Gate Park Oak Woodlands- where DPAs are located either within or adjacent to natural areas. These DPAs, combined with the one scheduled for closure at Lake Merced, constitute roughly 80% of the legal off-leash space in all city parks. SNRAMP also makes clear that if NAP claims the monitoring shows impacts on these natural areas from the dogs, the DPAs will be closed.

In other words, initial closures of dog play areas will be 16.4% of all dog play areas in San Francisco, but SNRAMP announces the potential for 80% of all dog play areas to be closed in the future. Since no evidence is provided by the DEIR that any damage has been done by dogs in the dog play areas that are being closed immediately, no evidence is likely to be provided to close most of the dog play area that would remain after the immediate closures.

In fact, in the one dog play area which will be closed entirely and immediately, both SNRAMP and the DEIR say that use of this area by visitors with dogs is minimal: "... the DPA at Lake Merced is not heavily used ..." (DEIR, page 258) One wonders what the justification is for closing this DPA if it is not heavily used and no evidence is available that damage has been done by dogs.

The DEIR states that it cannot analyze the impacts of possible GGNRA closures because they have yet to be finalized. However, we know the amount of off-leash areas in the GGNRA proposed for closure in January 2011: 90% of existing off-leash space on GGNRA lands have been proposed for closure. The final EIR should analyze the cumulative impacts of the maximum amount of closure proposed by both SNRAMP and the GGNRA. We saw on "Tsunami Friday" what those impacts could be. The GGNRA closed both Fort Funston and Ocean Beach to all visitors on the morning of Friday, March 11, 2011 because of concerns that a tsunami triggered by a major earthquake in Japan would strike the coast. On Tsunami Friday, a Recreation and Park Department staff member counted over 200 dogs at once in the Pine Lake DPA at 10 am, ten times more dogs than on a normal weekday (usually about 20 dogs at any one time), and more than three times the maximum number of dogs normally seen on busy weekends (about 60 dogs). This example graphically illustrates the potential impact on remaining DPAs of significant closures of off-leash space. Forcing so many more dogs into remaining DPAs day after day will undoubtedly lead to serious degradation of those remaining DPAs thereby creating the conditions that would justify closure in the future.

Without providing any analysis, the DEIR concludes the cumulative impacts of closure of off-leash areas by the GGNRA and those proposed by SNRAMP are "significant and unavoidable." So, in this rare instance in which the DEIR acknowledges significant impact on the environment and on recreational opportunities in San Francisco, it gives itself a free pass: "It's unavoidable." We beg to differ. The final EIR has options that must be considered. The

obvious and responsible thing to do is to NOT close any dog play area if there is no evidence that dogs are harming those areas.

The DEIR repeatedly justifies the exclusion of off-leash recreation because it says dogs have a significant negative impact on plants and wildlife. Yet it offers no evidence to support the claims of impacts. The DEIR repeatedly says dogs MAY be impacting protected plant species or wildlife (ppgs, 298, 305, 306, 472, 502, 517), yet offers no evidence these impacts are actually occurring or ever have occurred. After each of these claims, the DEIR goes on to say: Dogs MAY continue to impact plants or wildlife. If there is no proof of an impact, then that impact cannot “continue.” EIRs must be based on observed, documented impacts, not speculation about things that “may” happen at some point in the future. The final EIR must alter its analysis to address this and base any restrictions on recreation involving dogs on actual observed **impacts**. [SFFA-3-20]

- The NAP EIR considers only the NAP plans to close 15% of the legal off-leash space in SF city parks when considering impacts on the remaining DPAs and on recreation. However, the NAP plan also calls for expanding the most sensitive areas within natural areas, and this potentially could result in the closure of significantly more DPAs (up to 80% of the total off-leash space currently available in city parks, off-leash space that is located either within or adjacent to a natural area). These added closures (up to 80%) will significantly increase the impacts on recreation, on people with dogs, and on the remaining DPAs. These increased impacts were not considered in the EIR when it evaluated the Project Alternative, and without them, the analysis of the Project Alternative is incomplete and inadequate. [Bartolotta-1-06]
- The EIR does not address the significant precedence of the NAP labeling dogs as an “invasive” nuisance and how that impacts the likelihood of daily recreation being reduced for at least 30% of the San Francisco population and visitors with dogs. If the NAP allows for reducing usage by people with dogs then the maximum reduction should be evaluated and presented in the plan. Reducing the usage by such a large population is certainly a significant impact on recreation as well as on the health and safety of people and dogs. A well-exercised and socialized dog is a safe dog, and these dog play areas are critical for providing the space needed for exercising and socializing dogs. In addition, these areas are important for people to socialize and exercise as well. [Bowman-1-06]
- Second: restricting and narrowing the areas in which we can take our dogs off leash is in effect setting up ghettos for us. As the areas remaining become more crowded (as Upper Douglass Park is already becoming) the turf and quality of existence not just for the plants but for the people being packed inside diminishes. The wear and tear on the ground cover cannot withstand such heavy use. Some of that overburden is the result of dog walkers with limited options for off leash places and dogs needing exercise; but the limitations will also force more people into these remaining areas. [Carrington-1-02]
- If the proposed changes are implemented, the large existing population of dog owners will be forced into a greatly reduced number of parks, dramatically increasing the impact on those areas by sheer overuse of people and dogs. [Donovan-1-03]

- This GGNRA proposal will create dangerous situations of overcrowding and overburden city parks

There are very few spaces left for people to take their dogs. 1 in 3 Bay area residents has dogs, and thousands like myself and my husband go to GGNRA every single day. [Fitzer-1-02]

- 2) The NAP EIR's analysis of the impacts of the closure of all or part of Dog Play Areas (off-leash areas) is inadequate. The NAP EIR must consider the impacts on other DPAs and other parks, on recreation, and on transportation, global warming and climate change because people must drive to other DPAs because of DPA closures if up to 80% of the total off-leash space in city parks is closed (the amount of off-leash located either within or adjacent to natural areas). [Buckley-1-03] [Form Letter-1-02] [Ghosh-1-03] [Moyer-1-02] [Yip-1-02]
- I come to SF parks. The parks need to remain open for dogs and people for recreation. [Form Letter-1-19]
- I also take my dog to McClaren Park and Sutro Mountain and I would mourn the loss of public areas that I can take my dog.

Recreation should be a priority for the SF Recreation and Park Department and not removal of public lands from recreational opportunities. The proposed loss of walking trails, off-leash and on leash dog areas in the NAP EIR, couple with the GGNRA's proposed reduction of trails and dog-friendly trails, drastically reduces recreation areas for everyone in the Bay Area, both with and without dogs. [Garber-1-04]

- The NAP EIR considers only the closures of 15% of total off-leash space when determining impacts on remaining DPAs and recreation. Because the NAP plan puts 80% of off-leash space at risk of closure in the future, the NAP EIR must also consider the impacts of this much larger closure on remaining DPAs and on recreation. [Kelly-1-03]
- > any reduction on the number of off-leash play areas will put more of a strain on the remaining areas. There are more dogs in SF than children (so I've been told) and dogs need places to play. People, like myself, move to SF because it provides an urban environment that is dog friendly. Taking these away (potentially up to 80% given the wording of the proposal) will cause a huge strain on the remaining 20%, making them into unsustainable mud pits. [Naima-1-04]
- One thing that seems to be missing from many decisions being made regarding dogs and recreation in and around this city is that San Francisco is an URBAN area, not a wilderness area. We also have more households with dogs than children. It's not just about the dogs, it's also about the people who own the dogs and walk their dogs for exercise and recreation. My observation has been that the majority of dog owners are very conscientious and work together to keep areas clean and safe. Restricting the currently available areas will adversely impact the remaining Dog Play Areas. The dogs are not going away. We do not believe it is in the best interest of the residents of San Francisco to implement this restrictive plan. [Popoff-1-03]

- This latest plan would cut off traditional uses of parks and trails and we already have so few places to hike. The anti-dog bias seems based on people's opinions and dislike of dogs rather than facts or scientific studies. If you add this plan to the ridiculous and onerous GGNRA plan, dog owners will have no other option than to head to the nearest city parks – which already overcrowded for baseball and soccer games. [Smith-1-02]
- The analysis of the effects of the proposed closures of up to 80% of the Dog Play Areas in the city is incomplete. The impacts on other DPAs, parks, and the impact of park users traveling to the remaining DPAs on the environment have not been considered. [Summer-1-02]
- Additionally, the analysis of the effects of the proposed closures of up to 80% of the Dog Play Areas in the city is not adequate. Specifically, the impacts on other parks, DPAs, and the effects of transportation required to the remaining DPAs on the environment have not been considered. It also does not consider the impact the DPA closure would have on the physical and mental health benefits of people who walk with their dogs or on the social communities that exist within and around the parks. [Winqvist-1-02]
- So you have this squeeze while at the same time young families and young people are adopting dogs in record numbers, at the same time there's a squeeze in some plans to restrict the places these dogs can run, either on leash or off leash, and I think this needs to be seriously looked into and addressed by any EIR or any planning for off-leash dog areas in the future.

Don't restrict them. There's more dogs coming every day. Thank you. [PH-Noetzel-01]

Response RE-13

These comments question the effect the reduction of off-leash Dog Play Areas (DPAs) would have on other DPAs in terms of recreational capacity. Note, some commenters provide an inaccurate assessment of the acreage or percentage of DPAs that are proposed to be closed relative to what is available in the Natural Areas and in City parks outside of the Natural Areas and whether there are plans for future DPA closures.

Acreage of Off-Leash DPAs and On-Leash Areas Available within the City

There are over 30 designated DPAs that support off-leash dog use within San Francisco, seven of which are located in the Natural Areas. As shown in Draft EIR Table 5 on Draft EIR, Summary of Natural Areas Management Plan, p. 114, a total of 19.3 acres of DPAs out of a total of 95.2 acres would be reduced in size or closed to off-leash dog use within three Natural Areas (one would be closed and two would be reduced in size), resulting in 75.9 acres (or 80 percent) of off-leash DPAs within the Natural Areas that would remain open. The conversion of 19.3 acres of DPAs within the Natural Areas to on-leash dog areas would mean that 84 percent of all City DPAs would remain open. Additionally, within the 31 parks that contain Natural Areas within San Francisco and at Sharp Park, there are a total of approximately 2,724 acres of parkland that would be available for on-leash dog use, and additional park acreage is available at other parks throughout the city. Therefore,

there is opportunity for both off-leash and on-leash dog use within the Natural Areas and other city parks.

The Lake Merced off-leash DPA would be closed (approximately five acres), and the off-leash DPAs on Bernal Hill and in McLaren Park would be reduced in size (by six acres and 8.3 acres, respectively), as indicated by Draft EIR Table 5. The DPAs at each of the parks would be reduced in size or closed for the following reasons: (1) at McLaren Park, the DPAs would be reduced in size to restore creek riparian habitat with aboveground water available for wildlife, and the willow trees and surrounding scrub would be restored to provided habitat for the California quail (refer to SNRAMP p. 6.19-11); (2) at Bernal Hill, the DPAs would be reduced in size to protect sensitive plants and annual grassland habitat and to prevent or reduce erosion (refer to SNRAMP pp. 6.21-4 and 6.21-7); and (3) at Lake Merced, the DPAs would be closed to avoid disturbance to breeding birds (refer to Draft EIR p. 136); in fact, scientific review of the 2005 Draft SNRAMP specifically urged the relocation of the DPA at Lake Merced (Huntsinger and Bartolome 2005).

Project-Related and Cumulative Recreational Impacts and Impacts on other DPAs

The Draft EIR evaluated the project-related environmental impacts associated with reducing the amount of available DPAs provided by the SFRPD. The Draft EIR concludes that the proposed closure and reduction of DPAs, and the increased use of the other DPAs by visitors, would not result in significant impacts to recreational resources (Impact RE-1 and Impact RE-4 on Draft EIR pp. 257 to 258 and 259 to 260).

As stated on Draft EIR p. 258, the likelihood that Lake Merced recreation users, who are limited in number as discussed in Response G-1, p. 4-13, would use other DPAs within or outside of the Natural Areas largely depends on the users' proximity to another DPA; the next closest DPA is at Pine Lake, less than one mile north of Lake Merced. As the distance between a user and a DPA increases, the likelihood that the user would visit that DPA decreases. Thus, it is unlikely that DPAs within and outside of the Natural Areas would experience increased use to the point of physical deterioration or accelerated deterioration from the loss of 19.3 acres distributed among three DPAs; the remaining six DPAs (Bernal Hill, Buena Vista Park, Corona Heights, Golden Gate Park Oak Woodlands, McLaren Park, and Pine Lake) would have 75.9 acres available for off-leash use. In addition, and as previously mentioned, within the 31 parks that contain Natural Areas within San Francisco and at Sharp Park, there are a total of approximately 2,724 acres of parkland that would be available for on-leash dog use (refer to Table 5 of the Draft EIR), and additional park acreage is available at other parks throughout the city. Further, the SFRPD manages a total of 4,113 acres of recreation and open space areas, with 3,100 acres of that located in the City of San Francisco. As a result, the Draft EIR concluded (in Impact RE-1 on p. 258) that programmatic activities related to dog use would have a less-than-significant impact with respect to the physical deterioration of recreation facilities from increased use. Further, the SNRAMP project is not expected to result in an increase of dog use; instead, as articulated on Draft EIR pp. 84 to 87, some of the expressed goals and

objectives of the SNRAMP are to maintain and enhance native plant and animal communities; re-establish native community diversity, structure, and ecosystem function where degraded; and promote the functioning of San Francisco's native ecosystem, including the maintenance of native biodiversity. Therefore, the project seeks to maintain and enhance native species rather than expanding the use of the Natural Areas for off-leash recreation.

When project impacts are combined with impacts resulting from the GGNRA Dog Management Plan, the EIR conservatively determines that the cumulative impact of these two projects could accelerate the physical deterioration of the remaining DPAs and in the Natural Areas in general (Impact RE-7 on Draft EIR pp. 261 to 262; Impact RE-7 was further clarified and expanded in Response RE-2, RTC p. 4-313). As a programmatic analysis, and because the GGNRA's Dog Management Plan is still in the environmental review process, the cumulative analysis of recreational impacts caused by the closure or reduction of DPAs is qualitative, rather than quantitative. It is reasonable to conclude that the reduction of approximately 90 percent of off-leash DPAs at GGNRA and 20 percent within the Natural Areas would result in a significant cumulative impact to recreational use. Absent feasible mitigation, which was not identified in the SNRAMP Draft EIR, the impact would be significant and unavoidable. While there are other DPAs in the city, given that the NPS and the SFRPD control a majority of the parkland, there is not sufficient, alternative space available to reduce the level of significance of this impact. Refer also to Response RE-3, RTC p. 4-319, and Response RE-13, RTC p. 4-347, for a further discussion of the cumulative recreation analysis, which assumes implementation of the GGNRA Dog Management Plan.

One commenter suggested that the EIR should consider keeping the DPAs open to eliminate the significant and unavoidable cumulative impact; however, the project that is being proposed in the SNRAMP, and evaluated in this EIR, includes the conversion of limited DPAs to on-leash dog areas to protect and enhance sensitive biological resources; this conversion is part of the project. The commenter is essentially suggesting a project alternative. Two alternatives that evaluate keeping the existing DPAs open were evaluated in this EIR: the No Project Alternative (on Draft EIR pp. 455 through 480) and the Maximum Recreation Alternative (on Draft EIR pp. 493 through 511).

Refer also to Response G-26, RTC p. 4-114, for a discussion of the social impacts on dogs and humans as a result of a reduction of DPAs, and refer to Response G-25, RTC p. 4-106, for a discussion of dog impacts on plants and wildlife.

Future Closure or Conversion of DPAs

As shown in Table 5 of the Draft EIR, the effects of off-leash dog use on sensitive habitat areas would be specifically monitored at the oak woodlands in Buena Vista Park, the Golden Gate Park Oak Woodlands, and the small wildflower meadows at McLaren Park. The EIR identifies Draft EIR Mitigation Measure M-BI-1a, Protection of Protected Species and Riparian and Wetland Habitat, p. 298, which requires that DPAs within the Natural Areas shall continue to be evaluated in

accordance with the SFRPD's Dog Policy and be monitored for adverse effects to biological resources. If substantial adverse impacts to protected species are confirmed, the SFRPD shall take actions to protect those species, which may include installing signs, fencing, or protections including, but not limited to, decommissioning DPAs, in accordance with the SFRPD Dog Policy. In addition, as stated on Draft EIR p. 258, according to the SFRPD Final Dog Policy (SFRPD 2002), DPAs should be reviewed every three years for, among other things, degradation of the area. Any subsequent changes that might be required as a result of the monitoring activities required by Mitigation Measure M-BI-1a, Protection of Protected Species and Riparian and Wetland Habitat, p. 298, or as a result of SFRPD's triennial review of the Dog Policy could require further action by the SFRPD Recreation & Park Commission and could be subject to additional CEQA review.

While it cannot be stated that no new DPAs would be created in the city (and under the control of the SFRPD) during the 20-year planning period for the SNRAMP, the Draft EIR analysis is based on the existing conditions at the time the document was prepared, which assumed that no new SFRPD DPAs would be established. As stated in Response G-23, RTC p. 4-93, new or improved DPAs may be pursued in San Francisco by the SFRPD and/or through community-driven efforts; however, none are proposed or envisioned in the Natural Areas.

4.D.10 Biological Resources [BI]

The comments and corresponding responses in this section cover topics in Draft EIR Section V.G, Biological Resources.

Comment BI-1	Consider adding California Clapper Rail to Table 9
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The response to Comment BI-1 addresses all or part of the following individual comment:

GGAS-1-28

- During the bird breeding season of 2011, California Clapper Rail young were observed on multiple occasions at Heron's Head Park. This was the first detection of (likely) breeding California Clapper Rail in a considerable period and it is believed that the nesting pair derived from rail populations further south in the Bay. The appearance of this breeding, endangered bird highlights the importance of all of San Francisco's bayside wetland areas, including, potentially, India Basin. Golden Gate Audubon recommends that the Planning Department consider whether the California Clapper Rail should be included on Table 9. [GGAS-1-28]

Response BI-1

This comment suggests that the California clapper rail⁸⁴ should be included in Table 9, State and Federally Listed Species That May Occur Within the Natural Areas, on Draft EIR p. 278.

The clapper rail was not considered within the Natural Areas, as its recent recorded presence in Heron's Head Park from August 2011 was unknown at the time that the Draft EIR was published. Also, in 2016, following publication of the Draft EIR, the burrowing owl was observed near Hawk Hill and Corona Heights by a neighbor and city staff.

Site-specific and general management actions are recommended for the India Basin Shoreline Park Natural Area that would restore and enhance bayside wetland areas and provide habitat for California clapper rail. The improvements at India Basin would result in a stable and productive salt marsh environment that would benefit resident and migratory birds, including the California clapper rail. Additionally, improved water quality and reduced erosion are all potential benefits of this plan with respect to the California clapper rail. None of these improvements is expected to result in any long-term impacts to this sensitive species; however, actions necessary to make these improvements could result in short-term effects to California clapper rails. Impact BI-2 on Draft EIR p. 303 states that vegetation removal, trail modification, and the use of herbicides and pesticides have the potential to directly affect nesting birds and habitat for special status bird species that may occur in the Natural Areas or result in direct impacts, such as injury, mortality, or destruction of nests for those species protected by the MBTA and California Fish and Game Code and other protected bird species. However, Draft EIR p. 304 goes on to conclude a less-than-significant impact for the following reasons:

“In compliance with the MBTA, the SFRPD would avoid harming or removing the nests of these species and any migratory bird species. Implementation of GR-4b in the SNRAMP (page 109) would ensure that all vegetation management activities would be conducted outside the breeding season for bird species (February 1 through August 31, as designated by CDFG), unless these activities had already begun before the breeding season and had already removed nesting habitat, or if a breeding bird survey was conducted prior to vegetation removal activities and had determined that no nesting birds were present. If active nests (or large abandoned stick nests) are discovered as part of the breeding bird survey, a 150-foot-radius avoidance buffer would be centered on the nest sites to prevent the nesting birds from being disturbed by power tools. Weeds may be pulled by hand no closer than 50 feet from the nest. Measure GR-4b in the SNRAMP would ensure that direct impacts to nesting birds, including special status bird species, would be avoided and minimized. In accordance with Mitigation Measure M-BI-1a,

⁸⁴ In 2014, after publication of the Draft EIR, the California clapper rail's name was changed to the Ridgway's rail; however, to maintain consistency between the Draft EIR and this RTC document, the term California clapper rail will continue to be used. All references to the California clapper rail (or clapper rail) refer to the Ridgway's rail.

SFRPD would be required to consult with appropriate regulatory agencies when there is potential for protected bird species to be affected by a programmatic project. Additionally, where protected or nesting bird habitat is temporarily or permanently removed, Mitigation Measure M-BI-1a would ensure that measures are taken to restore or compensate for indirect impacts as a result of habitat loss. With implementation of these measures and compliance with the MBTA, short-term impacts from programmatic vegetation removal on protected and nesting bird species would be *less than significant.*"

The text on Draft EIR p. 279 has been changed to add the California clapper rail and the burrowing owl to Table 9, State and Federally Listed Species That May Occur Within the Natural Areas, as follows:

<u>Burrowing Owl</u>	<u><i>Athene cunicularia</i></u>	<u>--/CSC/--</u>	<u>Arid to semi-arid grasslands, with well-drained, level to gently sloping areas. Requires mammal burrow or natural hollow surrounded by sparse vegetation for breeding habitat.</u>	<u>P/ Observed near Hawk Hill and Corona Heights. The Golden Gate Audubon Society reports sightings at East Shore State Park, Cesar Chavez Park and the Tom Bates Sports Complex in Berkeley, at Martin Luther King, Jr. Shoreline Park in Alameda, and in some South Bay locations.</u>
<u>California clapper rail</u>	<u><i>Rallus longirostris obsoletus</i></u>	<u>FE/SFP/--</u>	<u>Freshwater marshes, wet meadows, and shallow margins of saltwater marshes.</u>	<u>P/ Observed at Heron's Head Park near India Basin.</u>

In addition, the text of Draft EIR pp. 289, 303, and 304 has been changed to address the California clapper rail and burrowing owl, as follows:

- On Draft EIR p. 289 (fourth paragraph):

Among the Natural Areas, India Basin is the only one that borders San Francisco Bay and provides the only habitat for migratory shorebirds. There are ten species of birds that are considered locally sensitive that have been observed at India Basin, and several of these are not found at other Natural Areas: black oystercatcher (*Haematopus bachmani*), pelagic cormorant (*Phalacrocorax pelagicus*), Brandt's cormorant (*P. penicillatus*), and pigeon guillemot (*Cepphus columba*). None of the locally significant species that have been observed are known to breed at India Basin. The restored wetlands and mudflats support nesting American avocet (*Recurvirostra americana*) and killdeer (*Charadrius vociferus*). According to the Golden Gate Audubon Society (as reflected in their comment later dated October 31, 2011), during the bird breeding season of 2011, California clapper rail young were observed on multiple occasions at Heron's Head Park (north of the wetlands at India Basin Park). The Golden Gate Audubon Society further stated that this was the first detection of (likely) breeding California clapper rail in a considerable period, and it is believed that the nesting pair derived from rail populations further south in the Bay. If restored, the more extensive saltgrass/pickleweed area could provide habitat for California black rail (*Laterallus jamaicensis coturniculus*) and California clapper rail (*Rallus longirostris obsoletus*), both protected under the state and federal Endangered Species Acts.

- On Draft EIR p. 303 (second full paragraph):

State and federally listed bird species have been recorded nesting at Sharp Park and Lake Merced. The double-crested cormorant (*Phalacrocorax auritus*) presently nests at Lake Merced and the salt marsh common yellowthroat (*Geothlypis trichas sinuosa*) presently occurs at Lake Merced and Sharp Park. The yellow warbler (*Dendroica petechia*) and bank swallow (riparia) have also been observed at Lake Merced. The double-crested cormorant nests on coastal cliffs and in trees. The salt marsh common yellowthroat requires saltwater or freshwater marsh and dense vegetation for nesting. The yellow warbler requires riparian woodlands and the bank swallow requires vertical cliffs near water bodies. The California clapper rail (*Rallus longirostris obsoletus*) has been observed near India Basin Shoreline Park. According to the Golden Gate Audubon Society (as reflected in their comment later dated October 31, 2011), during the bird breeding season of 2011, California clapper rail young were observed on multiple occasions at Heron's Head Park (north of the wetlands at India Basin Park). The Golden Gate Audubon Society further stated that this was the first detection of (likely) breeding California clapper rail in a considerable period, and it is believed that the nesting pair derived from rail populations further south in the Bay. In addition, the burrowing owl (*Athene cunicularia*) has been observed near Hawk Hill and Corona Heights, and the Golden Gate Audubon Society reports sightings at East Shore State Park, Cesar Chavez Park, and the Tom Bates Sports Complex in Berkeley, at Martin Luther King, Jr. Shoreline Park in Alameda, and in some South Bay locations. Bird species protected by the MBTA may occur at these and other Natural Areas.

- On Draft EIR p. 304 (first paragraph):

The yellow warbler and bank swallow have been observed foraging over Lake Merced, but have not been observed nesting there and would therefore not be impacted by invasive vegetation removal at Lake Merced. The California clapper rail breeds in salt marsh wetlands throughout the Bay. The activities in the SNRAMP at India Basin Shoreline Park that could affect California clapper rail include removal of invasive vegetation from the wetlands and planting. The burrowing owl could be affected by the removal of grasslands and other open spaces. However, in compliance with the MTBA, ...

California clapper rails are fully protected species under California Fish and Game Code. Fully protected species cannot be taken or possessed, except when authorized as part of a recovery action or for scientific collection. As such, Section 1.a of M-BI-1a, Protection of Protected Species and Riparian and Wetland Habitat, Draft EIR p. 299, has been revised, as follows:

For protected species and the fully protected California clapper rail, a qualified SFRPD biologist⁸⁵ shall survey for suitable habitat within the project area before the project begins, according to USFWS and CDFW protocol for the protected species having the potential to occur. If no protocol exists, surveys shall be conducted according to generally accepted survey methods. If individuals were found or if it is determined that the potential exists for protected species to be present, the SFRPD shall redesign the proposed project to avoid impacts on protected species. Avoidance/minimization measures shall include conducting project activities during periods of the species lifecycle when the species would not be affected or may be minimally affected by project activities. SFRPD shall not perform any activities that would result in take (as defined by California

⁸⁵ A SFRPD biologist knowledgeable about protected species occurring within the area proposed for disturbance. If no SFRPD biologists are familiar with the protected species occurring in the area proposed for disturbance, the SFRPD would be required to obtain a qualified biologist to conduct protected species surveys.

laws for fully protected species) of California clapper rails. If it is infeasible to avoid disturbance of to other protected species (besides the California clapper rail), the SFRPD will contact the USFWS or CDFW and undertake appropriate consultation according to the CESA or ESA (unless an existing Biological Opinion is already in place and the proposed activities fall under the actions of that Biological Opinion, as may be the case for impacts to the mission blue butterfly at Twin Peaks). Any additional requirements agreed to during consultation with the USFWS and CDFW, or other regulatory agencies, to protect the species would be implemented, including restoration and compensation, where required.

Comment BI-2	Corrections to permitting process
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The response to Comment BI-2 addresses all or part of the following individual comment:

SFPGA-3-14

- The description of the permitting process for implementation of the Sharp Park Restoration project needs to be corrected.

(a) Page 293 seeks to describe the state and federal permitting processes which would have to be completed prior to implementing the Restoration project. That description is inaccurate, and needs to be corrected as follows: (1) the City would not itself “consult” with the USFWS to obtain a Biological Opinion and associated Incidental Take Statement, rather such formal consultation under Section 7 of the Endangered Species Act would be performed by another federal agency, in this case the U.S. Army Corps of Engineers (although the City, as the applicant for the Corps permit, may participate in that consultation between the two federal agencies); (2) a “consistency determination” under the Fish and Game Code would not be required by the CRLF since that species is not listed as threatened or endangered under the California Endangered Species Act, and hence no take authorization from DFG is required; (3) a consistency determination for the SFGS is not available, as the SFGS is a “fully protected” species under the Fish and Game Code and DFG does not have the authority to authorize the incidental take of fully protected species; and (4) a state take permit for the western pond turtle is not required because this species is not listed as threatened or endangered under CESA. [SFPGA-3-14]

Response BI-2

This comment suggests revisions to the Draft EIR with respect to the permitting process for implementation of the Sharp Park restoration project.

As further described in Response AL-11, RTC p. 4-600, the Pumphouse Project, while separate and independent from the proposed restoration activities at Sharp Park under the SNRAMP, included the removal of 435 cubic yards of sediment and emergent vegetation within Horse Stable Pond and the connecting channel that links Horse Stable Pond with Laguna Salada. The purpose of the sediment removal of the Pumphouse Project is to improve breeding habitat for the California red-legged frog and reduce the potential for malfunction of the pumps caused either by sediment entering the pump system and/or by preventing water from entering the pump intake.

The proposed activities under the SNRAMP are articulated on Draft EIR pp. 144 to 146. These activities include dredging excess sediments and accumulated organic matter, including stands of encroaching tules, as well as other restoration activities. Under both projects, the Pumphouse Project and the SNRAMP, the SFRPD would continue to use the pumps to manage water levels in Horse Stable Pond to maintain California red-legged frog habitat. Neither the Pumphouse Project nor the SNRAMP would modify the operations of the existing pumps at Horse Stable Pond.

The SNRAMP Project is in the process of environmental review. If the EIR is certified by the Planning Commission and the Project is approved, the City will begin the permitting process for the proposed activities at Sharp Park that are part of the SNRAMP. As noted by the commenter, the City will consult with the USFWS through the U.S. Army Corps of Engineers (USACE) permitting process when preparing the Biological Assessment and obtaining a Biological Opinion and Incidental Take Permits. California Fish and Game Code Section 5050 indicates that “the department may authorize the taking of those species for necessary scientific research, including efforts to recover fully protected, threatened, or endangered species.” Because the Sharp Park restoration project is considered a recovery act, take of the San Francisco garter snake may be authorized by CDFW. It is noted that the Western pond turtle is not a state listed threatened or endangered species, but is a California Species of Special Concern. The text on Draft EIR p. 293 has been changed to clarify the permitting requirements for the Sharp Park Restoration Project, as follows:

Before implementing the proposed Sharp Park restoration, the SFRPD would be required to undertake the following, consistent with state and federal laws:

- Apply for a Section 404 permit from USACE, which would require, prior to issuance of the Section 404 permit, consultation with the USFWS regarding the biological assessment and issuance of a Biological Opinion and incidental take permit.
- Request a Section 401 water quality certification from San Francisco Bay Regional Water Quality Control Board, or a waiver thereof.
- Prepare a Biological Assessment and consult with the USFWS, through the USACE permitting process, to obtain a Biological Opinion and incidental take permit in accordance with the ESA.
- Coordinate with CDFG for a consistency determination for federally and state protected species (San Francisco garter snake and California red legged frog)
- ~~Apply for a take permit for state only listed species (western pond turtle) pursuant to Section 2081(b) of the CESA;~~
- ~~Obtain a permit from the US Army Corps of Engineers under Section 404 of the Clean Water Act;~~
- ~~Obtain a water quality certification from the SFBRWQCB under Section 401 of the Clean Water Act;~~
- Obtain a Streambed Alteration Agreement from the CDFG under Section 1602 of the California Fish and Game Code; and
- Obtain a Coastal Development Permit, as required by the CCC.

Comment BI-3	San Francisco sightings of Mission blue butterfly
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The response to Comment BI-3 addresses all or part of the following individual comments:

Bose-1-02

Bose-1-09

- Pg 319: Mission Blue Butterfly occurs at Twin Peaks and Sharp Park. The species is not recorded to occur at Sharp Park within the last decade. However, reintroduction is being attempted at Twin Peaks. [Bose-1-02]
- Pg 115, pg 294: Bayview Park is described as Mission Blue Butterfly habitat, without any evidence. Within the last decade, the butterfly has only been recorded at Twin Peaks. In very recent times, this is the result of importing dozens of them from San Bruno, where they do occur naturally. (The butterfly is also said to occur at Sharp Park, but again no evidence is provided.) Since this species depends on unstable disclimax habitat, only recent sightings would be relevant as the vegetation would change through natural succession. Attempts to create a habitat for this species would mean constant intervention to plant and then maintain disclimax habitats. [Bose-1-09]

Response BI-3

These comments identify where the Mission blue butterfly has been recorded within San Francisco.

Bayview Hill is identified within Draft EIR Chapter III, Project Description, as containing existing silver bush lupine (*Lupinus albifrons*), summer lupine (*Lupinus formosus*), and varied lupine (*Lupinus* sp.) populations which provide habitat for the mission blue butterfly. Table 9 identifies that the butterfly potentially occurs within McLaren Park, Bayview Park and the upper canyon at Sharp Park based on the presence of habitat. The Mission blue butterfly is known to occur on federal lands (Sweeney Ridge and Milagra Ridge) that are near Sharp Park and there is appropriate habitat for this species in the upper reaches of the canyon. In addition, the occurrence of the butterfly within these natural areas is documented in the CDFW California Natural Diversity Database, which is a record of historic occurrences of special-status species within the region, as shown in Table 9, State and Federally Listed Species That May Occur Within the Natural Areas, Draft EIR p. 278.

Comment BI-4	Sharp Park restoration and the San Francisco Garter Snake Recovery Plan
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The response to Comment BI-4 addresses all or part of the following individual comment:

Sierra Club-1-11

- Further analysis is necessary to ensure that the Laguna Salada restoration proposals are aligned with the ongoing efforts of the San Francisco Garter Snake Recovery Plan.

A major objective of the project is to provide habitat for the San Francisco Garter Snake, a federally listed species. In addition to ESA concerns, protection of endangered species is a priority per CEQA law as well. For instance, CEQA § 21001 (c), Additional Legislative Intent, states: "The Legislature further finds and declares that it is the policy of the state to: (...)

Prevent the elimination of fish or wildlife species due to man's activities, insure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities (...)." Thus a key element in any analysis is showing how these proposals tie in with the larger goals of the SFGS Recovery Plan. We also note that the Recovery Plan is currently undergoing revision. As stated in a recent report, there has been significant evolution in biological opinion since the Recovery Plan was first issued:

Since the initial recovery plan was published, wildlife managers have learned that the snake's upland habitat may be essential to its survival. On-going urbanization, combined with an increase in intensive agricultural operations, has contributed to the rapid loss and fragmentation of the snake's habitat and their primary prey species. The acquisition, restoration, and preservation of suitable habitat will be essential to this species' survival. (Source: National Park Service San Francisco Bay Area Network Resource Briefing, July 2010; Paul Johnson, biologist.)

Efforts should be made to analyze how the plan aligns with the most up-to-date recovery efforts, including recent research on population trends, demography, and genetics. Given the latest science on the importance of gene flow, and given the extremely vulnerable status of the species (some estimates place the total population at less than 2000 individuals), it is not enough to show that the plan provides the conditions of possibility for the survival of a subpopulation of 200 snakes. Rather, recent science shows that what is necessary is not only the provision of habitat but "ecological corridors" allowing connectivity between the isolated subpopulations. While the proposal to create an island of snake habitat in the middle of Laguna Salada may have merit, the approach may not be sufficient to satisfy the overall ecological requirements for a viable and self-sustaining snake population. [Sierra Club-1-11]

Response BI-4

This comment focuses on the merits of the proposed San Francisco garter snake habitat improvements at Sharp Park. No specific environmental issues about the adequacy or accuracy of the Draft EIR's coverage of environmental impacts are presented in this comment.

The following is provided for informational purposes only. The USFWS and CDFW have identified the wetland complex at Sharp Park as important habitat for San Francisco garter snake and California red-legged frog. Both agencies have suggested a restoration plan that enhances conditions in and around the wetlands to reduce the possibility of harm to and ensure the viability of the San Francisco garter snake population that is found in and around the wetlands. As described in Response BI-6, RTC p. 4-359, the activities described in the Sharp Park Restoration Plan are voluntary. During planning for the recovery effort, several broad goals were identified by SFRPD and through agency input. These goals are as follows: maintain and restore habitat for listed species, particularly the San Francisco garter snake and California red-legged frog; restore functional wetland and upland habitat that is high-value and low maintenance; comply with the requirements of state and federal regulations, including Federal Endangered Species Act (FESA) and the

California Endangered Species Act (CESA) and the Clean Water Act; and, preserve and enhance recreational opportunities that are compatible with the listed species goals. The San Francisco Garter Snake Recovery Plan was consulted when developing the Sharp Park restoration project and a local expert in San Francisco garter snake population biology and ecology guided the development of the plan. The goal of this recovery effort is to restore and enhance the San Francisco garter snake habitat in order to protect the population that currently exists there. While ecological connectivity may be an appropriate conservation strategy for some species, recent genetic data on the San Francisco garter snake may indicate that the next closest population to the one at Sharp Park/Mori Point is genetically different (Lim et al., in review); therefore, connecting the two populations may not be the best strategy to preserving the species beyond Sharp Park and Mori Point. The proposed actions at Sharp Park would not result in any increase in fragmentation of the San Francisco garter snake habitat and would serve to protect and enhance the current population of the species.

The comment also seems to suggest that CEQA requires the SNRAMP project to demonstrate that it is creating a viable self-sustaining San Francisco garter snake population. The effects of the project are measured against the baseline (existing) conditions and while the project is designed to benefit the snake, as described above, CEQA does not require project to demonstrate that it will result in self-sustaining population of the San Francisco garter snake.

Comment BI-5	Laguna Salada and Horse Stable Pond dredging effects on habitats
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The response to Comment BI-5 addresses all or part of the following individual comment:

Sierra Club-1-12

- Dredging proposals need further study. A major component of the proposed project is to dredge Laguna Salada and Horse Stable Pond to create open water habitat for the red-legged frogs (RLF's). We are concerned that dredging the may actually harm existing frog and snake habitat. We are also concerned about possible contamination in the sediments, especially given the presence of the Rifle Range upstream. Further analysis, as well as characterization of core samples, is needed to determine whether the proposed approach is the right one. [Sierra Club-1-12]

Response BI-5

This comment indicates that the dredging proposal for Laguna Salada and Horse Stable Pond need further study.

As discussed in the Draft EIR under Impact BI-6, dredging would cause temporary impacts to existing San Francisco garter snake and California red-legged frog habitat. Dredging would occur during the dry period after both California red-legged frog and San Francisco garter snake breeding seasons are over. Draft EIR Mitigation Measure M-BI-6a, Protection of Protected Species during Implementation of the Sharp Park Restoration Project, p. 326, contains avoidance measures, pre-construction activities and biological monitoring procedures that the SFRPD would be required to

adhere to in order to minimize the impacts to California red-legged frog and San Francisco garter snake during project implementation. These mitigations may be altered by resource agencies during the permit review process, as necessary.

The text on Draft EIR p. 387 (last paragraph) has been changed to clarify the discussion regarding potential contamination from the former rifle range at Sharp Park, as follows (also refer to Response HZ-4, RTC p. 4-557):

The SFRPD used to maintain a rifle range in Sharp Park. This facility has been closed for over 13 years. Located near the archery club, this facility is outside of the Natural Areas at Sharp Park. A soil and groundwater investigation identified the presence of lead, polycyclic aromatic hydrocarbons, antimony, and arsenic in soil in an area covering approximately 4 acres; groundwater was not impacted (DTSC 2009). The Department of Toxic Substances Control issued a Notice of Exemption on August 5, 2009, for the removal action work plan for consolidation of lead-contaminated soil at the former Sharp Park Rifle Range. Implementation of the work plan involves the excavation of approximately 12,000 to 16,000 cubic yards of contaminated soil, which would be placed on-site and covered with imported clean soil (DTSC 2009). These cleanup and remediation activities ~~have been~~ were completed in January 2011. Contaminated soil in the area was excavated, consolidated onto a 1.35-acre portion of the site, and covered with 2 feet of clean soil to prevent exposure to contaminants. SFRPD will continue to monitor and periodically report to the Department of Toxic Substances Control on the effectiveness of this corrective action.

Refer also to Response BI-7, RTC p. 4-365, for a discussion of potential impacts of lagoon drainage on sediment and water quality and California red-legged frog larvae.

Comment BI-6 Adequacy of Sharp Park sensitive-species analysis
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The response to Comment BI-6 addresses all or part of the following individual comment:

GGAS-1-31

- Golden Gate Audubon does not agree with the analysis provided under Impact BI-6 that the plan for Sharp Park as laid out in the DEIR will result in impacts that are less than significant to sensitive species with mitigation. (See DEIR, at 319-343) Golden Gate Audubon believes that the breadth of impacts has not been adequately described or studied in the DEIR and is concerned that the incomplete nature of the DEIR in this regard constitutes a potentially fatal flaw that is subject to challenge. Golden Gate Audubon also believes that implementation of the proposed Sharp Park project would inevitably conflict with the federal Endangered Species Act and potentially other federal and state laws, resulting in difficulty in obtaining permits and perhaps further litigation regarding the matter. Golden Gate Audubon reiterates its recommendation to the Planning Department that it tier off study of the Sharp Park project for further study and subsequent review and approval. [GGAS-1-31]

Response BI-6

This comment does not agree that impacts to sensitive species at Sharp Park would be less than significant with mitigation (as concluded in Impact BI-6 of the Draft EIR).

The conclusions reached in the Draft EIR concerning the effects of the proposed project on sensitive species and the adequacy of the mitigation measures identified are supported by substantial evidence. As stated on Draft EIR p. 322, the sensitive species present within the Laguna Salada Wetland Complex are the San Francisco garter snake, California red-legged frog, western pond turtle, and saltmarsh common yellowthroat. Impact BI-6 evaluates the potential effects of both the Sharp Park restoration activities and maintenance activities on each of these species and identifies detailed mitigation measures to lessen or avoid potentially significant impacts related to these activities. The commenter provides no support for the general opinions expressed concerning the analysis provided under Impact BI-6 or the breadth of impacts described in the Draft EIR.

As discussed in Response PD-13, RTC p. 4-175, a primary purpose of the actions described in the SNRAMP and the Draft EIR with respect to Sharp Park is to contribute to the recovery of the California red-legged frog and San Francisco garter snake. Because the Sharp Park restoration project is considered a recovery action, take of the San Francisco garter snake may be authorized by CDFW. It is noted that the Western pond turtle is not a state-listed threatened or endangered species, but is a California Species of Special Concern. The proposal described in this Draft EIR for Sharp Park (at the Laguna Salada wetland complex, where the restoration would occur) was developed in close coordination with the USFWS, CDFW, and consulting biological experts and determined to be appropriate for the recovery of the San Francisco garter snake population.

During the review of the proposed project, the resource agencies would determine the permitting requirements for the project. In order to clarify that the restoration actions described in the SNRAMP and Draft EIR are voluntary, the following text is added to the beginning of the only full paragraph on Draft EIR p. 98:

The Sharp Park Restoration project is a voluntary and discretionary action by the City, a primary purpose of which is to provide higher quality habitat for the San Francisco garter snake, a State and Federally endangered species, as well as a species identified as fully protected under the State Fish and Game Code, and the California red-legged frog, a State threatened species; further, it is an action that is consistent with the species recovery objectives of both the federal Endangered Species Act and the California Endangered Species Act. The improvements to protect and enhance the California red-legged frog and San Francisco garter snake at Laguna Salada under measure SP-4a are focused on restoring the marsh complex and associated uplands. ...

As stated in the Draft EIR, SFRPD would acquire all required permits and approvals, including those under CESA and FESA, from state and federal agencies before commencing work on the Sharp Park restoration project (refer to Draft EIR p. 293). The mitigation measures identified in the Draft EIR would be included, as appropriate, in applications for these permits. The state and federal resource agencies may impose additional conditions they determine to be necessary for resource protection in connection with issuance of permits for the project. Accordingly, implementation of the proposed Sharp Park project would not conflict with state or federal laws including CESA and FESA.

Comment BI-7	Impacts of lagoon drainage on sediment and water quality
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The response to Comment BI-7 addresses all or part of the following individual comments:

SFPGA-3-12	Baye-1-02	Baye-1-04
Baye-1-06	Baye-1-11	Baye-1-13
Baye-1-14		

- Description of restoration project preconstruction mitigation measures is incomplete. (a) On page 102, first complete paragraph, the DEIR states that water levels in Laguna Salada, Horse Stable Pond, and the connecting channel between them, would be temporarily lowered to allow equipment to access the shoreline, and surveys would then be performed and any observed CRLF or SFGS would be relocated. This discussion should be expanded to (1) note that the capture and relocation of CRLF or SFGS may only be performed by a qualified biologist who possesses appropriate permits from the U.S. Fish and Wildlife Service and the California Department of Fish and Game, and (2) require that as part of this pre-construction process a silt fence will be installed and maintained in a manner that would prevent CRLF or SFGS from re-entering the construction zones. [SFPGA-3-12]
- **2. The DEIR fails to analyze and mitigate significant predictable impacts of preconstruction lagoon drainage, and dredging sulfidic, anoxic coastal lagoon sediments.**

The DEIR's level of CEQA analysis of the proposed 60,000 cubic yard maximum dredging project at Laguna Salada is inadequate for a highly sensitive coastal wetland complex inhabited by two federally listed wetland-dependent endangered species (California red-legged frog, San Francisco garter snake), regardless of intended "habitat restoration" or enhancement aims. Outstanding aspects of this deficiency are evident in the lack of DEIR analysis of the following proposed "restoration" actions and impacts, as well as the omission of reasonable and feasible alternative "restoration" methods:

- > draining (dewatering) Laguna Salada prior to construction and dredging, proposed in the Sharp Park Conceptual Restoration Alternatives Report cited by the DEIR (Tetra Tech 2009, Appendix I of the DEIR)
- > if the lagoon is not drained prior to construction activities, sediment and water quality impacts of dredging in a closed fresh-brackish lagoon system where red-legged frog tadpoles are present;
- > omission of any feasible alternative methods of wetland habitat enhancement other than dredging, such as modification of lagoon water level and flooding management.
- > omission of wetland fill at the northeast end of the lagoon, where marsh is currently mown to function as golf turf, to convert them to elevated upland golf fairways (failure to identify wetlands regulated under current policy criteria of the California Coastal Commission, as well as erroneous omissions from the past Clean Water Act Section 404 wetland delineation)

The proposed draining of Laguna Salada to prepare for "restoration" construction is clearly articulated in Appendix I of the DEIR (Tetra Tech 2009; DEIR Appendix I, p. 48), but the

impacts of draining the lagoon are not assessed in the DEIR. This is an incredibly oversized omission; dewatering the lagoon alone would be sufficient as a significant impact to trigger an EIR. Dewatering the lagoon would kill any late-maturing California red-legged frog tadpoles present in any part of the lagoon prior to dewatering, and would be expected to result in "take". This would be a highly significant impact requiring mitigation, and the only feasible mitigation measure would be to avoid draining the lagoon, i.e., an alternative method. Incredibly, the restoration plan on which the DEIR relies suggests as the only mitigation for draining the lagoon an absurd "capture and relocation" (to where?) of endangered species stranded by lagoon dewatering, with vague, unspecified actions arising during future endangered species consultation to address the uncertain feasibility of mitigation:

... although every effort would be made to capture and relocate sensitive wildlife resources prior to construction, the possibility of harm to listed species remains although every effort would be made to capture and relocate sensitive wildlife resources prior to construction, the possibility of harm to listed species remains. Impacts to listed species would be addressed extensively during the Section 7 consultation process with USFWS and during similar consultation with CDFG, and standard and specific practices to minimize the potential for take will be developed at that time. [Tetra Tech 2009, p. 48]

The DEIR simply includes no impact analysis or mitigation for the immensely significant impact of dewatering the lagoon prior to project construction.

If the lagoon is drained, the exposure of sulfidic anoxic lagoon bottom sediments to oxygen on the drained lagoon would release hydrogen sulfide (also not addressed in air quality impacts), and cause rapid oxidation of ferrous and other reactive reduced sulfide compounds, releasing abundant sulfuric acid, ferric oxides, phosphates, and ammonia – all of which would be potentially toxic to aquatic or amphibious wildlife. The DEIR fails to disclose obvious strong indicators of highly sulfidic, anoxic sediments exposed during summer drawdown (low water levels) in the lagoon, as shown below.

[Caption:] **Iron oxide surface films and iron sulfide accumulation of muds exposed by artificial lagoon drawdown.** Iron oxide (orange-brown mineral films indicative of oxidation of iron sulfide and acid sulfates in brackish coastal sediments subject to alternating strong hypoxia and oxidation) are apparent in drawdown-emergent muds at the northeast end of Laguna Salada (left). Organic-rich sediment immediately below the iron oxide-stained surface sediment film is deep black (right), indicative of toxic iron sulfide, formed under strong anoxic bottom conditions, exposed at the marsh surface by artificial drawdown of the lagoon.

If the lagoon is not drained for dredging, dredging would cause suspension of anoxic, sulfidic bottom sediments in the water column of the lagoon, which would potentially cause hypoxia (severe oxygen deficiency associated with high mortality of fish, amphibians, and invertebrates in the water column) and mobilization of toxic sulfides and ammonia. The DEIR severely underestimates the potential severity, complexity, and persistence of wetland impacts due to dredging anoxic, sulfidic organic lagoon bottom and marsh sediments (DEIR,

p. 370). The DEIR treats potential impacts of sulfidic anoxic sediment dredging only qualitatively, without any explicit assessment of the severity or level of significance of sediment and water quality impacts in the body of the DEIR.

The DEIR provides no sediment testing data or analysis of potential impacts of dredging anoxic, sulfidic organic brackish to fresh (past seawater-influenced, sulfur-enriched) lagoon bed sediments. Suspension of highly reduced organic "black ooze" organic sediments of the lagoon bed has high potential for causing potentially lethal impacts to California red-legged frog tadpoles due to mobilization of toxic sulfides (hydrogen sulfide, ferrous sulfide), ammonia, and subsequent short-term water column hypoxia, and persistent aerobic formation of toxic acid sulfates and nitrates. The DEIR similarly provides no assessment of potential eutrophication impacts (excessive nutrient loading) of the lagoon due to liberation of ammonia/ nitrate and phosphates from suspended anoxic dredged bed sediments. The DEIR impermissibly defers dredge sediment testing analysis and mitigation to future permit processes, as part of a programmatic rather than project-specific mitigation measure (Mitigation HY-3).

4. Summary of CEQA deficiencies and recommendations for remedies.

In summary, the DEIR:

- > fails to disclose the dewatering (draining) of the lagoon as a restoration construction measure proposed in Appendix I of the DEIR;
- > fails to analyze sediment and water quality impacts of mobilizing sulfidic, anoxic lagoon bed sediment, and subsequent acid sulfate soil formation; [Baye-1-02]
- The DEIR specifically fails to identify, assess, avoid, or mitigate potential significant acute impacts of dredging to California red-legged frog larvae (tadpoles, the aquatic life-history phase) due to hypoxia and sulfide toxicity due to dredging-induced suspended sulfidic sediments and organic matter in the water column. The DEIR also fails to address overwhelming potential impacts of draining and dewatering the lagoon, a destructive method of facilitating lagoon excavation proposed in the Sharp Park Conceptual Restoration Alternatives Report (p. 45).

Because the DEIR is intended to be project-specific for Sharp Park, and is the lead CEQA document for the project, the deferral of potentially significant dredge sediment impacts and mitigation to future (CEQA responsible and trustee) regulatory agency review is inappropriate, and I believe it is also impermissible under CEQA.

4. Summary of CEQA deficiencies and recommendations for remedies.

In summary, the DEIR:

- > fails to analyze impacts or mitigate impacts of lagoon drainage and dewatering;

The DEIR consequently fails to provide adequate project-level CEQA analysis for the highly significant potential Sharp Park Restoration project impacts, and provides inadequate even for programmatic CEQA of this project.

In my independent opinion as a professional coastal ecologist with extensive experience in management of coastal lagoon wetland ecosystems in this region, the proposed Sharp Park "restoration" project, as currently proposed, is likely to cause risks of more long-term significant environmental harm than good. Risks of long-term harm to the lagoon ecosystem and its resident endangered species would be due to inadequate planning, inadequate scientific understanding and analysis of the lagoon's degradation, inadequate scientific peer review of project design, inadequate CEQA analysis of the impacts of the proposed "restoration" project, and inadequate CEQA analysis of feasible alternatives. [Baye-1-04]

- The mitigation measures for Laguna Salada dredging water quality impacts in the DEIR (HY-3) were as cursory and inadequate as the impact analysis: they relied on generalized programmatic, generic best management practices that do not address specific issues of dredging sulfidic lagoon bottom sediments (HY-1, BI-12). The DEIR cannot defer substantive mitigation to future mandatory permits from other agencies (BI-12a mitigation) to address the impacts caused by projects of the CEQA lead agency. The few substantive physical mitigation measures identified for sulfidic sediment dredging (such as addition of lime to dredge spoil sediment) do not address potentially significant water column and water quality impacts in the lagoon itself, which may include acute anoxia or hypoxia, acute short-term concentration of hydrogen sulfide, ferrous sulfide, and ammonia, and long-term liberation of metals (including heavy metals) and acid sulfates. The few programmatic mitigation measures for dredging are based on future dredge sediment testing without any corresponding physical actions to actually minimize impacts: they contain no contingency measures to avoid or minimize impacts if anoxic sulfidic sediments are widespread and problematic for dredging — as should be expected from strong field indicators of widespread intensive formation of ferrous sulfide in bed sediment below surface, and rust-colored ferric oxide films at the surface of the emergent northeastern lagoon flats in summer. The rigor of mitigation feasibility assessment, like the corresponding impact analysis for water quality impacts of dredging, were grossly deficient even for an Initial Study, let alone a full project-level DEIR.

4. Summary of CEQA deficiencies and recommendations for remedies.

In summary, the DEIR:

- > fails to present essential dredge sediment testing data specific to anoxic sulfidic lagoon bed sediments, and analyze sediment (and contaminant) fates and impacts in the context of the sensitive wetland and endangered species habitat, and impermissibly defers dredge sediment testing data analysis and mitigation to post-EIR permitting; [Baye-1-06]
- In addition, the report utterly neglects one of the principal constraints on dredging or excavating anoxic, organic wetland soils – excessive release of toxic sulfides, and their subsequent acid sulfate oxidation products. Failure to address sulfide and sulfate toxicity in wetland excavation can result in extreme mortality of wildlife, and inhibition of wetland revegetation. This omission adds to the strained technical credibility of the report. [Baye-1-11]

- Most astonishing of all is the report's assumption (p. 48) that the lagoon should or must be drained in order to implement "enhancement" work. This not only technically in error, it is absurd. Amphibious excavation equipment (floating or low ground-pressure tracked vehicles) is routinely used in wetland engineering, and is the professional standard for minimizing impacts during wetland construction. Draining wetlands at Laguna Salada would cause intolerable impacts (likely including increased salinity intrusion) and is unwarranted for any reasonable enhancement alternative. [Baye-1-13]
- The number of significant errors of omission and invalid assumptions about wetland ecology in the report suggest that the authors lack adequate experience and expertise for coastal wetland planning, and failed to solicit adequate technical peer review or supplemental consulting services to remedy technical deficiencies.

Conclusion. The Sharp Park conceptual alternatives report is fundamentally flawed as a coastal habitat planning document for both short-term and long-term conservation or land uses. The report either omits or misinterprets fundamental geomorphic and hydrologic controls of coastal lagoon wetland ecology that are essential to long-term conservation planning. The habitat enhancement recommendations in the report utilize unrealistic ecological and wetland engineering assumptions, and are likely to be infeasible in the long term. Many of the report's basic assumptions conflict with or are unsupported by the scientific literature on coastal processes, wetlands and lagoons. In my professional opinion, the report should be either set aside or subject to rigorous interdisciplinary scientific peer review, including expertise in coastal geomorphology and engineering, wetland hydrology, and ecology. [Baye-1-14]

Response BI-7

These comments questions whether draining the lagoon in Sharp Park is necessary; the extent to which sediment and water quality impacts could occur; the potential for the exposure of sulfidic anoxic lagoon bottom sediments to oxygenate in the lagoon; the potential for alternative methods of wetland habitat enhancement (e.g., other excavation equipment); and the extent of wetlands impacted in the northeastern portion of the lagoon. One comment also suggests that the description of proposed restoration project is incomplete and makes suggestions for how it could be expanded and/or revised.

These comments also address impacts to California red-legged frog larvae (including the aquatic life-history phase) due to hypoxia and sulfide toxicity as a result of dredging-induced suspended sulfidic sediments and organic matter in the water column and questions the Draft EIR's analysis of impacts of draining and/or dewatering the lagoon.

As mentioned, these comments address several issues. While some of these issues are related, they require separate responses in order to fully address the comment; therefore, the following headings are provided: draining the lagoon; sediment and water quality impacts; acid sulfate soil conditions (Sharp Park); use of suction hydraulic equipment; sediment testing and mitigation; alternative methods of habitat enhancement; and wetlands in the northeastern portion of the lagoon.

Draining the Lagoon

The proposed project does not include draining the lagoon in Sharp Park in order to conduct restoration activities. Instead, water levels would be lowered by use of the pumps, but, once it drops below the level of the culvert, it would remain at a static level. While the Sharp Park Conceptual Restoration Alternatives Report indicated that the lagoon and pond would be drained, SFRPD subsequently determined that it would not be necessary in order to complete the restoration activities. The work that would be required is accurately described in Draft EIR Chapter III, Project Description, p. 102, which identifies the construction activities required to implement the restoration plan, as follows:

“To facilitate deepening of Laguna Salada, Horse Stable Pond, and the channel that connects them, as well as removal of encroaching bulrushes and tules, the water levels would be lowered temporarily to allow equipment to access the shoreline for removal of accumulated vegetation and sediments. This would be accomplished by operating the pumps at Horse Stable Pond to draw water through the wetland complex and out to the Pacific Ocean. It is anticipated that the water level in the wetland complex would be lowered from an approximate elevation of 7.5 feet above mean sea level (msl) to an elevation of approximately 4.5 feet msl, a decrease of 3 feet. Following lowering of the water levels, a qualified USFWS-approved biologist would survey the entire project area for California red-legged frogs and San Francisco garter snakes. If individuals are found during the survey, the biologist would relocate them to appropriate aquatic habitat, such as that near Mori Point, located south of Horse Stable Pond (or other suitable location as agreed to as part of consultation with the USFWS and/or CDFG); these activities would be conducted in coordination with the USFWS and CDFG.”

The text on the fourth paragraph of Draft EIR p. 103 has been changed to clarify the specific species that are being discussed, as follows:

To protect the California red-legged frogs and San Francisco garter snakes during restoration work, the SFRPD anticipates conducting the restoration activities between May 1 and October 15 and would continue to coordinate the planning and undertaking of these activities with the USFWS and CDFG; this activity period avoids the breeding season for the California red-legged frog and the season when San Francisco garter snakes are inactive in their winter burrows. ...

If water levels in Horse Stable Pond or Laguna Salada fall below sea and beach groundwater levels, then saline groundwater may flow into the lagoon from the beach.⁸⁶ The California red-legged frog cannot breed when salinity levels exceed approximately four parts per thousand (ppt).⁸⁷ Although salinity levels may increase in Horse Stable Pond during construction activities, consistent with the Draft EIR, construction is prohibited from November 15 through April 15 (and allowed between

⁸⁶ U.S. Fish and Wildlife Service (USFWS), *In Reply Refer To: 08ESMF00-2012-F-0082-2, Formal Endangered Species Consultation on the Sharp Park Safety, Infrastructure Improvement, and Habitat Enhancement Project in San Mateo County, California*, October 2, 2012 (“Biological Opinion”).

⁸⁷ Swaim Biological Incorporated, *Sharp Park Wildlife Surveys*, December 4, 2008.

May 1 and October 15)⁸⁸ to avoid the breeding season of California red-legged frog; however, the exact dates restoration-related construction activities are allowed or prohibited will ultimately be determined by the resource agencies as part of the permitting process.

After construction is complete, winter storm runoff would result in substantial freshwater inputs to the wetland complex, causing any increased salinity levels to return to baseline levels. Therefore, the potential impacts to California red-legged frog associated with increased salinity levels would be temporary, would occur outside the breeding season for California red-legged frog, and would not be considered significant.

Refer also to Response HY-2, RTC p. 4-493, for a further discussion of the salinity assessment prepared for the Pumphouse Project, and refer to Response AL-11, RTC p. 4-600, for further evidence that increasing the system's storage capacity through extensive dredging would not result in diminished water levels or compromised water quality (including salinity levels).

Sediment and Water Quality Impacts

Sediment and water quality impacts associated with the proposed dredging activities at Sharp Park are presented in Impact HY-3 (on Draft EIR pp. 370 to 372) and Impact BI-6 (on Draft EIR pp. 320 to 330).

Acid Sulfate Soil Conditions (Sharp Park)

Since publication of the Draft EIR in 2011, a Final Mitigated Negative Declaration (FMND) was prepared for the Sharp Park Safety, Infrastructure Improvement, and Habitat Enhancement Project (Pumphouse Project), which includes, among other project elements, removal of sediment and emergent vegetation within Horse Stable Pond and the connecting channel that links Horse Stable Pond with Laguna Salada. The Pumhouse Project contains similar elements, although smaller in scale, to what is proposed as part of the SNRAMP project for Sharp Park; therefore, the information and analysis provided in the FMND with respect to acid sulfate soil conditions would apply to the SNRAMP project, and is provided as a series of text changes to the SNRAMP Draft EIR.

The text on Draft EIR pp. 370 to 371 (last paragraph) has been changed, as follows:

Dredged materials could result in potential impacts on water quality through conversion of the chemical characteristics of the soil after exposure to oxygen. Coastal lagoons, such as Laguna Salada and Horse Stable Pond, are sometimes favorable environments for the accumulation of sulfide minerals from biological decay and lack of oxygen. The sulfides can be converted to sulfuric acid when exposed to atmospheric oxygen by dredging them and placing them on the ground surface. Although not expected to significantly alter surface water pH, acidic soils could have undesirable localized effects on sensitive aquatic habitat. As described in Section III.F.2 (page 99), "Prior to on-site use of dredged material, the sediments to be removed as part of the wetland

⁸⁸ To clarify, the SNRAMP Draft EIR allows restoration (or construction) activities between May 1 and October 15 and prohibits restoration (or construction) activities between November 15 and April 15.

restoration project would be tested for elevated concentrations of sulfides and other characteristics to determine whether the sediments would serve as soils suitable for supporting desired vegetation. If the sediment proves unsuitable, it would be placed in a nonsensitive location or treated to render it capable of supporting the desired vegetation. Treatment may include spreading and mixing the dredged material with native soil to avoid concentrating acidic soils or adding lime to neutralize acidic soils.”~~sediments would be tested to determine if elevated concentrations of sulfides are present and if the sediments could serve as soils suitable for supporting desired vegetation. Treatment of acidic soils may include spreading and mixing the dredged material with native soil to avoid concentrating acidic soils, placing the dredged material in a nonsensitive location, or treating the dredged material with lime to neutralize the acid.~~

Environmental effects that could occur from excavating sediments in the presence of acid sulfate soils may include one or more of the following: (1) increase in sulfuric acid; (2) decline in pH; (3) increase in dissolved metal concentrations (aluminum, iron, and arsenic); and (4) increased incidence of hypoxia.⁸⁹ Any of the above effects could result in significant impacts (e.g., effects that could jeopardize the continued existence of a population of special-status species or effects to water quality beyond thresholds indicated in state or federal water quality standards).

A literature search indicates that very little research has been done on acid sulfate soils in the San Francisco Bay Area. One case in which acid sulfate soils have arisen as a concern is at the Bair Island tidal marsh restoration area, in Redwood City, California. In that case, the main concern was that sediments that had been excavated and stockpiled for re-use at the site contained sulfides that converted to sulfates as the sediments dried out. Re-use of these materials could result in acidic and hypoxic conditions. Aside from the case above, the literature search did not identify other case studies where acid sulfate soils effects have occurred in Bay Area restoration sites.⁹⁰

Removal of sediment in the connecting channel between Horse Stable Pond and Laguna Salada was reported to have occurred more than 10 years ago. While it was smaller in scale than what is proposed as part of the SNRAMP project, at that time, no effects that would normally be associated with acid sulfate soils, including acidification of waters and sediment surfaces, were identified. Also, at the time of the previous removal, it was reported that the bottom of Horse Stable Pond was lined with gravel. The previous sediment removal activity removed sediments that had accumulated after the seawall was constructed. Because the sediment to be removed as part of the proposed project is likely to have only accumulated since the last removal activity, it is unlikely that acid sulfate soils would exist in the sediments to be excavated. Sources of these sediments include input from the watershed during storms, as well as accumulated organic matter from dead and decaying vegetation in the watershed complex. This means that these sediments accumulated without the saline conditions that allow acid sulfate soils to form and can be eliminated as a contributor to acid sulfate soils conditions,⁹¹ supporting the conclusion that the proposed sediment and vegetation removal would not likely result in the substantial disturbance of acid sulfate soils in the water column and would not, in turn, result in a significant impact to special-status species.

In summary, other reasons supporting the conclusion that it would be unlikely for hypoxic conditions to occur during the proposed sediment and emergent vegetation removal include the

⁸⁹ Harry Gibbons and Robert Plotnikoff, Tetra Tech, Inc., *Acid Sulfate Soils Technical Memorandum*, August 27, 2013.

⁹⁰ Harry Gibbons and Robert Plotnikoff, Tetra Tech, Inc., *Acid Sulfate Soils Technical Memorandum*, August 27, 2013.

⁹¹ Harry Gibbons and Robert Plotnikoff, Tetra Tech, Inc., *Acid Sulfate Soils Technical Memorandum*, August 27, 2013.

following: (1) when sediment was previously removed from the connecting channel approximately 10 years ago, no effects that would normally be associated with acid sulfate soils, including acidification of waters and sediment surfaces, were identified; (2) the sediment to be removed as part of the proposed project has only accumulated since the last removal activity, which would have removed all the sediment that accumulated before the current seawall was constructed, and, therefore, has accumulated without the saline conditions that allow acid sulfate soils to form; (3) the Biological Opinion for the Pumphouse Project concluded that the project would not jeopardize the continued existence of California red-legged frog or San Francisco garter snake with the implementation of the Conservation Measures included in the Biological Opinion; and (4) in compliance with the Pumphouse project, soil sampling was completed and no acid soil sulfates were found. The same or similar Conservation Measures included in the Pumphouse project Biological Opinion would likely be included in the SNRAMP Biological Opinion as well, or have already been incorporated into the project mitigation measures identified in this EIR.

On November 22, 2013, Fugro Consultants (Fugro) collected shallow sediment samples from four locations (one on the west side of Laguna Salada, two at Horse Stable Pond, and one in the connecting channel).⁹² The purpose of the sediment sampling and analyses was to evaluate the potential for acid sulfate soil conditions in advance of planned soil and vegetation removal. The sediment samples collected by Fugro were then analyzed by Tetra Tech.⁹³ Page 3 of the Tetra Tech memorandum concluded that “There is no indication that acid sulfate soils are found within the upper 3 feet of sediments, which is the depth proposed for sediment and vegetation removal. The sulfate concentrations found near the surface of the sediment cores in all cases reflect sources from the surrounding land use activity.” Page 3 further concludes that “Nothing in the sediment analysis showed any naturally-occurring biological reason that excavation of sediments could cause elevated pH levels, therefore if elevated pH levels do occur they would likely be evidence of an artificial deposit of material that can elevate pH if allowed into the water column.” These reports were provided to the USFWS and CDFW. In response,⁹⁴ Mr. Erickson, on behalf of the USFWS, stated that “I have reviewed the information you submitted to the Service, and agree with the methods and conclusions of the report.”

In order to ensure potential impacts are mitigated to a less-than-significant level, in the unlikely event that anoxic conditions materialize, pertinent aspects of Pumphouse FMND Mitigation Measure M-BIO-2b, Protection of Special-Status Species and Water Quality from Acid Sulfate Soils and Other Components, p. 124, are incorporated into Draft EIR Mitigation Measure M-BI-6a, Protection of Protected Species during Implementation of the Sharp Park Restoration Project, p. 326. Pumphouse FMND Mitigation Measure M-BIO-2b was subject to public review and comment,

⁹² Fugro Consultants. Memorandum from Glenn Young, PG, LEED AP, and Jeriann Alexander, PE, REPA, Fugro Consultants, to Matt Jasmine, to Matt Jasmin, SFRPD. *Sediment Sampling and Analyses Sharp Park Habitat Restoration Project, Pacifica, California*, October 10, 2014.

⁹³ Tetra Tech. Memorandum from David Munro and Robert Plotnikoff, Tetra Tech, to Sarah Jones, San Francisco Planning Department. *Sediment Core Chemistry Evaluation, Laguna Salada and Horse Stable Pond Sediment and Vegetation Removal Project*, April 28, 2015.

⁹⁴ Email from Peter Bjorn Erickson, USFWS, to Stacy Bradley, SFRPD, May 19, 2015.

which allows SNRAMP Draft EIR Mitigation M-BI-6a to be further informed by that public process. In addition, the two mitigation measures are consistent with one another, which further supports a consistent implementation effort.

As described in the Pumphouse Project FMND on p. 84, the toxic pathways analysis method for analyzing the potential for bioaccumulation of toxics in the environment is an approach recommended by the USEPA for determining risk to wildlife and plants. Pathways analysis is used to determine environmental conditions that would mobilize toxics and increase exposure that could have chronic or acute effects. If this analysis indicates that their presence could potentially result in substantial stress to special-status species, the mitigation measure requires SFRPD to implement remediation measures, as approved by the USFWS and CDFW, to ensure that impacts to special-status species are reduced to a less-than-significant level. Further, this mitigation measure also provides for post-construction monitoring of pH levels for a period of six weeks after the proposed sediment and vegetation removal is completed to ensure that conditions are within the established toxicity standards; if monitoring indicates that additional remediation is necessary, the mitigation measure requires such remediation to be completed.

Similar to the Pumphouse FMND Mitigation Measure M-BIO-2b, Protection of Special-Status Species and Water Quality from Acid Sulfate Soils and Other Components, p. 80, SNRAMP Mitigation Measure M-BI-6a, Protection of Protected Species during Implementation of the Sharp Park Restoration Project, p. 326, would also require soil sampling tests, as necessary, prior to commencement of the proposed sediment and vegetation removal, and review of the results of such soil sampling tests by resource agencies, including the USFWS, CDFW, and any other applicable responsible agencies. If soil sampling shows that acid sulfate soils could be present and/or there is the potential for anoxic conditions in the water column, the mitigation measure requires SFRPD to perform a toxic pathways analysis to determine potential risks and toxicities to species that may be affected by localized increases in acidity, hypoxia, or dissolved metals concentration and to determine the appropriate remediation measures.

While hypoxic conditions are unlikely to occur for all of the reasons provided in the above text change to the Draft EIR, in the event that they do materialize, the text on Draft EIR pp. 326 to 328 (Mitigation Measure M-BI-6a, Protection of Protected Species during Implementation of the Sharp Park Restoration Project, p. 326) has been changed, as follows:

M-BI-6a: Protection of Protected Species during Implementation of the Sharp Park Restoration Project

The SFRPD shall implement the following, subject to modification during the required regulatory approval processes:

Avoidance Measures:

- The number of access routes, the size of staging areas, and the total area of activity would be the minimum necessary to achieve the project goals and to the extent feasible access routes shall be located in upland areas;

- Vehicle and equipment operators would use existing access roads and would remain outside of wetlands and riparian areas that are not integral to the restoration project;
- The construction documents for the Sharp Park restoration project would identify construction staging areas, access corridors, and work zones that are least impactful to biological resources, as well as golf play and operations. Avoidance of wetlands and other biological resource areas, however, would take precedence over avoidance of golf play areas, such that golf play and operations would be impacted rather than biological resources;
- After surveying the construction site for special-status species in accordance with this mitigation measure, silt fencing or exclusion fencing would be placed around the project and staging areas to reduce the potential for animals to enter the construction site. Fencing will be monitored throughout construction to ensure no San Francisco garter snakes, California red-legged frogs, or western pond turtles enter the area; fencing will meet CDFG specifications so as to avoid impacts to species potentially getting trapped in the fence.
- No restoration and construction shall occur between November 15 and April 15, the breeding season for California red-legged frog and the season when San Francisco garter snakes are inactive in their winter burrows, although shrubs and willow posts may be planted by hand after the first rains, and weeds may be removed within 15 feet of aquatic areas during these times;
- Before moving any vehicles that remain stationary for longer than 30 minutes, the biological monitor would inspect those vehicles to ensure that no animals had crawled beneath them for cover;
- During project activities, all trash that could attract nonnative predators would be properly contained, removed from the work site, and disposed of regularly. Following project completion, all trash and construction debris would be removed from work areas.

Pre-Construction and Construction Activities:

- Prior to commencement of any on-site work related to the proposed removal of sediment and emergent vegetation in the Laguna Salada wetland complex, which includes the Horse Stable Pond and the connecting channel and culverts that link Horse Stable Pond and Laguna Salada, additional sediment core sampling tests shall be conducted, as necessary, in the manner specified in this mitigation measure to determine whether there are elevated concentrations of sulfides or other soil characteristics that would render the soils unsuitable for supporting the desired vegetation.

The results of the sediment core sampling tests shall be submitted to the USFWS and CDFW for review prior to commencement of any on-site remediation work or sediment/vegetation removal work at Horse Stable Pond or the connecting channel and culverts.

If remediation measures are required based on the results of the sediment core sampling tests, the SFRPD shall submit a remediation and monitoring plan (prepared by a qualified biological/hydrological consultant) to all applicable resource agencies for review prior to implementation of the remediation measures. Alternatively, the soils could be placed in a nonsensitive location. Copies of all correspondence with the resource agencies shall be submitted to the ERO. The sediment core sampling tests shall include the following elements:

1. Work Plan

A Work Plan for sediment core sampling tests shall be prepared by a qualified SFRPD biological/hydrological consultant and submitted to the USFWS and CDFW for review. The Work Plan shall describe, at a minimum, compliance with Tasks 2 through 5 of this part of the mitigation measure, as well as the "During and Post-Construction pH Monitoring" requirement (see following section). Copies of all correspondence with the responsible agencies shall be submitted to the ERO.

2. Sampling of Sediment Cores

The locations of any additional sampling shall be determined pursuant to the work plan developed in accordance with Task 1, above. Sample sediment cores shall include the soils between the current surface sediment level and approximately two to three feet below the current surface. This depth shall be at least one foot below the proposed depth of the future sediment-water interface.

3. Analysis of Sediment Cores and Estimation of the Potential for Formation of Acid Sulfate Soils

The sediment cores shall be analyzed every five centimeters over the first 20 centimeters of core depth and then every 10 centimeters, or as appropriate based on field conditions, for the remainder of the core length for the following components: Total Organic Carbon (TOC), carbonate/bicarbonate, sulfate, sulfide, sulfites, pH, calcium, sodium, iron, aluminum, chloride, conductivity, redox potential, refractory organics, organic nitrogen, total phosphorus, ammonia, nitrate+nitrite nitrogen, soluble reactive phosphorus, organic phosphorus, loosely-sorbed phosphorus, iron-phosphorus, iron-phosphorus, aluminum-phosphorus, and calcium-phosphorus. Sediment core chemistry shall be analyzed to assess the potential reduction of sulfate to form hydrogen sulfate, iron sulfides, and reduction buffering capacity relative to acid-neutralizing capacity.

In addition, sediment oxygen demand (SOD) in the sediment cores shall be measured. Results shall be compared to the total oxidizable organic material, which would be estimated from the difference of TOC and refractory organic carbon (labile carbon). These results shall be used in the analysis of potential for formation of anoxic conditions within the Laguna Salada Wetlands Complex.

Sediment cores shall be analyzed based on Toxicity Reference Values (TRVs) from the USEPA and Screening Quick Reference Tables (SQuiRT) from the National Oceanic Atmospheric Administration.⁹⁵ A draft summary of potential toxics shall be provided to the USFW, CDFW, and ERO for review and, if needed, revision will be made to the toxicity ranges appropriate for use in analyzing the sediment cores.

⁹⁵ NOAA, Office of Response and Restoration. SQuiRT Cards. This document is available online at: <http://response.restoration.noaa.gov/cpr/sediment/squirt/squirt.html>, accessed on July 17, 2013.

The potential for formation of acid sulfate soils and anoxic conditions in the water column shall be estimated based on this analysis and in coordination with the USFWS and CDFW. If this analysis determines that acid sulfate soils could be present in this location, the SFRPD shall perform a toxic pathway analysis to determine the appropriate remediation measures. The analysis results and determination shall be submitted to the USFWS, CDFW, and ERO.

4. Toxics Pathway Analysis

Should the potential for acid sulfate soils and anoxic conditions be present, a toxics pathway analysis shall be conducted for potential risks and toxicities to species that may be affected by localized increases in acidity, hypoxia, or dissolved metals concentration. During this Task, toxicity standards shall be established in coordination with the USFWS, CDFW, and ERO based on the results of Tasks 2 and 3 above, site-specific hydrologic conditions including water exchange and dissolved oxygen levels, the species that are known to be present, and literature review. The results of this task shall be submitted to the USFWS and CDFW and any applicable responsible agencies for review and comment. Copies of all correspondence with the responsible agencies shall be submitted to the ERO.

Should the results of the sediment core tests reveal that there has been an appreciable increase in the amount of nitrogen and related compounds in the sediment cores, any necessary measures to remediate such compounds shall be undertaken in accordance with Task 5, below. The SFRPD shall hire a qualified biological/hydrological consultant to prepare a remediation and monitoring plan which shall be submitted to the USFWS and CDFW for review and approval. Copies of all correspondence with the resource agencies shall be submitted to the ERO for review.

5. Remediation

If results of the sediment core chemistry analysis reveal the potential for reduction of sulfate to form hydrogen sulfate, iron sulfides, and its reduction in buffering capacity relative to acid-neutralizing capacity, or if the toxics pathway analysis indicates that their presence could potentially result in substantial stress to special-status species, the SFRPD shall implement remediation measures.

Remediation measures could include, but are not limited to:

- a. Addition of lime to neutralize any acid that exists or which may form during the sediment removal process;
- b. Injection of sodium nitrate to oxidize the sediments, thereby satisfying the sediment oxygen demand; or
- c. Use of suction hydraulic sediment removal that reduces re-suspension of any form of sediments.

Depending on the severity of the condition (e.g., hypoxia), the remediation measure selected for implementation would be the least intensive beginning with Item a, when signs of hypoxia are present, to the most intensive with Item c, when hypoxia is persistent and/or widespread. The SFRPD shall select the remediation measure in consultation with the USFWS and CDFW. The

remediation measure shall be selected based on immediate threats to species and sensitive life stages present during occurrence of the hypoxic condition.

- A worker education program shall be implemented to familiarize workers, including all vehicle operators, of the importance of avoidance of harm to special-status species and the proper protocol should a protected species be encountered. The training shall include a discussion of the importance of maintaining speed limits and respecting exclusion zones. The SFRPD and its construction contractor shall confirm that all workers have been trained appropriately.
- Two weeks prior to the commencement of work activities and immediately prior to commencement of work, a qualified biologist will survey aquatic habitat that is suitable for the California red-legged frog, San Francisco garter snake, and western pond turtle that would be affected by the project. If individuals in any life stages of these species are found, the biologist will contact the USFWS and/or CDFG to determine whether relocating any life stages is appropriate. Collection of California red-legged frogs, San Francisco garter snakes, and western pond turtles would be done with hand nets, and shall be relocated to areas of appropriate habitat;
- Upland vegetation in all construction areas will be progressively cleared by hand equipment to a height of 4 inches and checked for the presence of protected species prior to disturbance and prior to construction equipment or vehicles entering the sites. Once vegetation is cleared, an additional pre-activity survey for the San Francisco garter snake, western pond turtles, and California red-legged frogs will be conducted in the impact area.
- Prior to construction near wetlands or ponds, all rodent burrows in the construction area will be hand excavated until the burrows terminate or to a maximum depth of 30 centimeters in areas where soil or fill will be removed or placed.

Biological Monitor:

- A biological monitor familiar with the identification and life history of California red-legged frog, San Francisco garter snake, western pond turtle, and other potentially present protected species, and with the appropriate agency authorization, shall be designated to periodically inspect onsite compliance with all mitigation measures.
- The biological monitor shall perform a daily survey of the entire project area during construction activities. During these surveys, the monitor shall inspect the exclusion fencing for individuals trapped within the fence and determine the need for fence repair. Throughout the duration of the project, the monitor shall continue to perform daily fence surveys and compliance reviews at the project site. The monitor shall be designated prior to project implementation and shall have at least one specialty environmental monitor on call, with a valid 10(a)(1)(A) permit to handle listed species. The specialty monitor shall direct all personnel in regards to interactions with protected species, perform authorized species relocations, and supervise all reporting on such species.
- Bullfrog monitoring will occur and egg masses detected shall be removed.

During and Post Construction pH Monitoring:

During sediment and vegetation removal in the Laguna Salada Wetland Complex, pH levels immediately above the sediment shall be monitored by the SFRPD to ensure that

implementation of the proposed project would not adversely affect special-status species.⁹⁶ To ensure that residual acid sulfates in the water column would not adversely impact special-status species, pH levels in Horse Stable Pond and the connecting channel shall be monitored by the SFRPD for a period of six weeks after the proposed sediment and vegetation removal is completed. A remediation measure, such as addition of lime or injection of sodium nitrate, shall be implemented if the monitoring warrants such a remediation measure to protect special-status species based on the toxicity standards that are established in accordance with Task 4 above.⁹⁷

Mitigation Measure M-BI-6a, Protection of Protected Species during Implementation of the Sharp Park Restoration Project, p. 326 in the Draft EIR, specifically indicates that two weeks prior to the commencement of work activities and immediately prior to commencement of work, a qualified biologist will survey aquatic habitat that is suitable for the California red-legged frog, San Francisco garter snake, and western pond turtle that would be affected by the project. If individuals in any life stages of these species are found, the biologist will contact the USFWS and/or CDFG to determine whether relocating any life stages is appropriate. Collection of California red-legged frogs, San Francisco garter snakes, and western pond turtles would be done with hand nets, and shall be relocated to areas of appropriate habitat. The mitigation measure also states that after surveying the construction site for special-status species in accordance with this mitigation measure, silt fencing or exclusion fencing would be placed around the project and staging areas to reduce the potential for animals to enter the construction site. Fencing will be monitored throughout construction to ensure no San Francisco garter snakes, California red-legged frogs, or western pond turtles enter the area; fencing will meet CDFW specifications so as to avoid impacts to species potentially getting trapped in the fence.

As stated, amended Mitigation Measure M-BI-6a, Protection of Protected Species during Implementation of the Sharp Park Restoration Project, p. 326, describes the specific measures and performance standards required to mitigate adverse impacts to special-status species as a result of potential acid sulfate soil conditions in the unlikely event that they occur. Draft EIR Section V.H, Hydrology and Water Quality, also identifies Mitigation Measure M-BI-12b, Laguna Salada Restoration Project Wetland Mitigation Plan, p. 340, which addresses post-construction monitoring of water quality; Mitigation Measure M-HZ-13, Emergency Response Plan for Accidental Releases of Hazardous Materials, p. 395, which addresses the procedures to follow if unanticipated spills of hazardous materials occur; and Mitigation Measure M-HY-1, Implementation of Stormwater Pollution Prevention Measures, p. 366, which describes the National Pollutant Discharge

⁹⁶ pH is an indicator of anoxic conditions at the sediment-surface water interface. Under anoxic conditions, hydrogen ion availability increases and binds with sulfides mobilized from sediments. Rates of transformation of sulfur are mediated by microorganisms in both the sediments and surface water. Suspension of hydrogen sulfide (H₂S) in the water column is oxidized in surface water to form sulfuric acid (H₂SO₄).

⁹⁷ David Munro, Tetra Tech, Inc., Email to Stacy Bradley, SFRPD, Sharp Park Appeal: M-BI-2b – Post Construction Monitoring, January 7, 2014.

Elimination System (NPDES) General Construction Permit process. The text on Draft EIR p. 372 (after the third paragraph) has been changed to refer to Mitigation Measure M-BI-6a, Protection of Protected Species during Implementation of the Sharp Park Restoration Project, p. 326, and to present an impact conclusion, as follows:

In order to ensure that hypoxic conditions do not materialize and to mitigate such conditions in the unlikely event that they do occur, Mitigation Measure M-BI-6a would be implemented by the SFRPD to reduce the potential for adverse impacts to special-status species as a result of acid sulfate soils and other components by prescribing avoidance measures, pre-construction activities (e.g., worker education program, aquatic habitat surveys, hand-clearing of vegetation, and hand excavation of burrows, sediment core sampling tests, and toxic pathways analysis), remediation activities (if the results of the sediment core chemistry analysis reveals the potential for the reduction of sulfate or if the toxics pathway analysis indicates that their presence could potentially result in substantial stress to special-status species), and monitoring (e.g., biological and pH). Therefore, with implementation of Mitigation Measure M-BI-6a, a *less-than-significant* impact to special-status species (as a result of acid sulfate soil conditions) would occur.

In addition, Draft EIR Section V.G, Biological Resources, has been amended to include analyses and conclusions from the Pumphouse FMND concerning potential impacts to the California red-legged frog caused by acid sulfate soil conditions, as well as the findings of the USFWS's formal endangered species consultation for the Pumphouse Project (also referred to as the "Biological Opinion") for both the California red-legged frog and the San Francisco garter snake.⁹⁸

The text on Draft EIR pp. 323 to 324 (beginning with the last paragraph on Draft EIR p. 323) have been changed to address impacts caused by potential anoxic conditions to the California red-legged frog or San Francisco garter snake, followed by a discussion of the findings of the Biological Opinion for the Pumphouse Project, as follows:

California Red-Legged Frog. During restoration, impacts to California red-legged frogs from the Sharp Park restoration project would be similar to those described above for San Francisco garter snakes. Temporary impacts from construction activities would result in the disturbance of feeding, breeding, and dispersal behaviors. The removal of encroaching vegetation may disturb California red-legged frogs sheltering within the plants. Project activities that may cause California red-legged frogs to move out of their resident habitat may cause injury or mortality due to lack of adequate forage or cover. Impacts also would occur from construction activities involving vehicle traffic and the use of heavy equipment which could result in direct mortality of individuals. Short-term impacts of construction activities that result in injury, mortality, and habitat disturbance would result in significant impacts on the frog. Implementing Mitigation Measure M-BI-6a includes pre-activity surveys, a worker education program, a biological monitor during construction activities, in addition to an on-call specialty environmental monitor with a valid 10(a)(1)(A) permit to handle California red-legged frogs and relocate as needed, and additional avoidance and minimization measures which include vegetation being cleared by hand equipment to a height of 4 inches and checked for the presence of frogs prior to construction and vehicles

⁹⁸ U.S. Fish and Wildlife Service (USFWS), *In Reply Refer To: 08ESMF00-2012-F-0082-2, Formal Endangered Species Consultation on the Sharp Park Safety, Infrastructure Improvement, and Habitat Enhancement Project in San Mateo County, California*, October 2, 2012 ("Biological Opinion").

entering the site. Any relocation efforts would be coordinated with the appropriate agency to minimize any adverse effects. These measures would reduce impacts to California red-legged frogs from restoration activities. As described above, Mitigation Measure M-BI-6a would ensure that measures are taken to effectively move individuals out of harm's way. This measure would reduce the impact to California red-legged frogs by avoiding and minimizing impacts sufficiently to ensure no injury or mortality of individual frogs to the maximum extent feasible.

Sedimentation. ~~Additionally,~~ California red-legged frogs may be adversely affected by increased sedimentation caused by runoff associated with the project activities. Erosion control measures such as straw mulch, sediment traps, and wattles would be installed to eliminate the potential for sediment discharge in to the wetlands during the construction process, as described under Mitigation Measure M-HY-1. Implementing Mitigation Measures M-HY-1 and M-BI-6a, which includes measures to install silt fencing would reduce impacts to California red-legged frogs from sedimentation during restoration by avoiding and minimizing impacts to the California red-legged frog and its habitat to sufficiently avoid injury or mortality of the frog. With implementation of M-BI-6a and M-HY-1, the short-term impacts of Sharp Park restoration activities on the California red-legged frog as a result of sedimentation would be *less than significant*.

Acid Sulfate Soil Conditions. When exposed to dissolved or atmospheric oxygen, sulfides transform to sulfuric acid, which in turn results in the formation of acid sulfate soils. Environmental effects that could occur from excavating sediments in the presence of acid sulfate soils may include one or more of the following: (1) increase in sulfuric acid; (2) decline in pH; (3) increase in dissolved metal concentrations (aluminum, iron, and arsenic); and (4) increased incidence of hypoxia.⁹⁹ Any of the above effects could result in significant impacts (e.g., effects that could jeopardize the continued existence of a population of special-status species or effects to water quality beyond thresholds indicated in state or federal water quality standards).

A literature search indicates that very little research has been done on acid sulfate soils in the San Francisco Bay Area. One case in which acid sulfate soils have arisen as a concern is at the Bair Island tidal marsh restoration area, in Redwood City, California. In that case, the main concern was that sediments that had been excavated and stockpiled for re-use at the site contained sulfides that converted to sulfates as the sediments dried out. Re-use of these materials could result in acidic and hypoxic conditions. Aside from the case above, the literature search did not identify other studies where acid sulfate soils effects have occurred in Bay Area restoration sites.¹⁰⁰

Removal of sediment in the connecting channel between Horse Stable Pond and Laguna Salada was reported to have occurred more than 10 years ago. While it was smaller in scale than what is proposed as part of the SNRAMP project, at that time, no effects that would normally be associated with acid sulfate soils, including acidification of waters and sediment surfaces, were identified. Also, at the time of the previous removal, it was reported that the bottom of Horse Stable Pond was lined with gravel. The previous sediment removal activity removed sediments that had accumulated after the seawall was constructed. Because the sediment to be removed as part of the proposed project is likely to have only accumulated since the last removal activity, it is unlikely that acid sulfate soils would exist in the sediments to be excavated. Sources of these sediments include input from the watershed during storms, as well as accumulated organic matter from dead and decaying vegetation in the watershed complex. This means that these sediments accumulated without the saline conditions that allow acid sulfate soils to form and can be eliminated as a

⁹⁹ Harry Gibbons and Robert Plotnikoff, Tetra Tech, Inc. Acid Sulfate Soils Technical Memorandum.

¹⁰⁰ Harry Gibbons and Robert Plotnikoff, Tetra Tech, Inc. Acid Sulfate Soils Technical Memorandum.

contributor to acid sulfate soils conditions,¹⁰¹ supporting the conclusion that the proposed sediment and vegetation removal would not likely result in the substantial disturbance of acid sulfate soils in the water column and would not, in turn, result in a significant impact to special-status species.

In the event the acidification is detected to a degree harmful to special-status species, to ensure that residual acid sulfates in the water column would not adversely impact special-status species, Mitigation Measure M-BI-6a requires monitoring of water quality for a period of six weeks after the proposed sediment and vegetation removal is completed; it also prescribes remediation measures if the monitoring determines that such activities are warranted based on the exceedance of toxicity standards. If acid sulfate soils are present, suction hydraulic equipment could also be used to minimize suspension of sediments relative to other sediment removal methods, allowing sulfides to settle out of the water column more quickly, as indicated in Draft EIR Chapter III, Project Description, page 102.

In summary, other reasons supporting the conclusion that it would be unlikely for hypoxic conditions to occur during the proposed sediment and emergent vegetation removal include the following: (1) when sediment was previously removed from the connecting channel approximately 10 years ago, no effects that would normally be associated with acid sulfate soils, including acidification of waters and sediment surfaces, were identified; (2) the sediment to be removed as part of the proposed project has only accumulated since the last removal activity, which would have removed all the sediment that accumulated before the current seawall was constructed, and, therefore, has accumulated without the saline conditions that allow acid sulfate soils to form; (3) the Biological Opinion for the Pumphouse Project concluded that the project would not jeopardize the continued existence of California red-legged frog or San Francisco garter snake with the implementation of the Conservation Measures included in the Biological Opinion; and (4) in compliance with the Pumphouse project, soil sampling was completed and no acid soil sulfates were found. The same or similar Conservation Measures included in the Pumphouse project Biological Opinion would likely be included in the SNRAMP Biological Opinion as well, or have already been incorporated into the project mitigation measures identified in this EIR.

Should any anoxic conditions materialize, they are expected to be localized and short-term. California red-legged frog larvae and juveniles are likely to escape these small, short-lived anoxic zones as the zones dissipate with settling of the sediment and dilution by the pond.^{102,103} The Biological Opinion for the Pumphouse Project concluded that the implementation of Conservation Measures would minimize the likelihood that adult or juvenile California red-legged frog would be present and would reduce potential adverse effects on the California red-legged frog due to anoxic conditions to a less-than-significant level. Similar conservation measures are included in a mitigation measure in the SNRAMP Draft EIR, and the Draft EIR independently made the same less-than-significant conclusion regarding impacts to the California red-legged frog.

Construction Effects. The Biological Opinion for the Pumphouse Project noted that because California red-legged frog and San Francisco garter snake have been observed throughout the project site, the effects of the construction activities to wetland and upland habitat and to individual California red-legged frog and San Francisco garter snake will be throughout the construction footprint. Injury, exposure disorientation and disruption of normal behaviors will

¹⁰¹ Harry Gibbons and Robert Plotnikoff, Tetra Tech, Inc. *Acid Sulfate Soils Technical Memorandum*.

¹⁰² Robert Plotnikoff, Tetra Tech, Inc. Email to Stacy Bradley, SFRPD, Suggested Change to the MND, December 3, 2013.

¹⁰³ Robert Plotnikoff, Tetra Tech, Inc. Email to Alexis Ward, SFRPD and David Munro, Tetra Tech, Inc., Sharp Park, December 30, 2013.

likely result from the removal and/or disturbance of vegetation, sediments, and cover sites, including animal burrows, boulders or rocks, or organic debris, such as downed trees or logs in the Horse Stable Pond and the connecting channel. Construction noise, vibration, and increased human activity during construction may interfere with normal behaviors such as feeding, sheltering, movement between refugia and foraging grounds, and other essential behaviors. This can result in avoidance of areas that have suitable habitat and can cause disturbance to the species. Direct effects may include injury or mortality from being crushed by earth moving equipment, construction debris, and worker foot traffic. Work activities, including noise and vibration, may result in adverse effects to California red-legged frog and San Francisco garter snake by causing them to leave the work area. This disturbance may increase the potential for predation and desiccation.

However, the Biological Opinion¹⁰⁴ issued by the USFWS for the Pumphouse project ultimately concluded that the project would not be likely to jeopardize the continued existence of the California red-legged frog or San Francisco garter snake with the implementation of the Conservation Measures included in the Biological Opinion; relevant measures to the Sharp Park Restoration Project are also contained in SNRAMP Mitigation Measures M-BI-1a, M-BI-6a, M-BI-6b, and M-BI-12a. These measures limit construction activities to May 1 through October 15 and also include measures to protect species, such as pre-construction avoidance and survey tasks, site monitoring by USFWS/CDFW-approved biologists during construction activities, limitations on vehicle speeds in the project area, erosion control measures, and others. These Conservation Measures are intended to minimize the likelihood for the potential take of individual California red-legged frog and San Francisco garter snake.

The Biological Opinion for the Pumphouse Project also discusses the possibility of California red-legged frog mortality through entrainment (individuals being pulled along with water and trapped against screening or pulled into the pumps) of egg masses and individual larvae at the pumps (see pages 33 and 34 in the Biological Opinion). The Biological Opinion discusses the restoration actions and conservation measures that the SFRPD will undertake in order to reduce these effects and protect the species. The same or similar these Conservation Measures included in the Pumphouse project Biological Opinion would likely be included in the SNRAMP Biological Opinion as well, or have already been incorporated into the project mitigation measures identified in this EIR (SNRAMP Mitigation Measures M-BI-1a, M-BI-6a, M-BI-6b, and M-BI-12a), which would minimize the likelihood of the potential take of individual California red-legged frog through entrainment. The continued existence of California red-legged frog would not be jeopardized, and, therefore, SNRAMP construction impacts leading to frog mortality through entrainment at Sharp Park would be *less than significant*.

Depletion of oxygen in the water column. Anoxic sediments containing sulfides have associated bacteria like *Thiobacillus* sp. that reduce sulfur. Bacterial respiration near the bottom of a waterbody can modify oxygen concentrations in overlying water, causing some level of anoxia. When this condition occurs, the pH of the water begins to decline, resulting in an acidic environment. Depletion of oxygen in the water column is mediated by the rate of photosynthesis during peak portions of a day. The degree to which water becomes acidified depends on the length of time that sulfides are suspended in the water column and the amount of sulfides in the water column. In general, the longer that sulfidic soils are suspended in the water column, the more chance there is

¹⁰⁴ U.S. Fish and Wildlife Service (USFWS), *In Reply Refer To: 08ESMF00-2012-F-0082-2, Formal Endangered Species Consultation on the Sharp Park Safety, Infrastructure Improvement, and Habitat Enhancement Project in San Mateo County, California*, October 2, 2012 (“Biological Opinion”).

for acidic conditions to occur. This could cause mortality of California red-legged frog larvae and juveniles.¹⁰⁵ However, the Biological Opinion¹⁰⁶ issued by the USFWS for the Pumphouse Project ultimately concluded that the project would not be likely to jeopardize the continued existence of the California red-legged frog or San Francisco garter snake with the implementation of the Conservation Measures included in the Biological Opinion. The same or similar Conservation Measures included in the Pumphouse project Biological Opinion would likely be included in the SNRAMP Biological Opinion as well, or have already been incorporated into the project mitigation measures identified in this EIR (SNRAMP Mitigation Measures M-BI-1a, M-BI-6a, M-BI-6b, and M-BI-12a). A *less-than-significant* impact would occur with respect to depletion of oxygen in the water column as a result of implementation of the SNRAMP project at Sharp Park.

Over the long-term, the Laguna Salada restoration project would result in beneficial impacts to California red-legged frogs by converting freshwater marsh, where tadpoles are often unable to penetrate the dense vegetation and where female frogs may lay their eggs only to be left stranded above water, to open water habitat. The removal of dense emergent vegetation will allow for a higher quality of breeding habitat for the frogs which will result in an increased survival of egg masses and tadpoles. The conversion of freshwater marsh habitat to open water would discourage the growth of dense stands of bulrush and cattails that have overgrown the wetlands and reduced the quality of habitat for California red-legged frogs.

Use of Suction Hydraulic Equipment

While Draft EIR Chapter III, Project Description, p. 99, indicates that excavating equipment would be used for the restoration activities, suction hydraulic equipment could be used to minimize the disturbance of sediments relative to other sediment removal methods. Accordingly, the text of the Draft EIR has been revised to address this possibility in two locations, adding the same explanatory text in both locations. The following paragraph has been added to Draft EIR p. 102 (after the first partial paragraph) the to Draft EIR p. 375 (after the first paragraph of the Impact HY-9 discussion):

To facilitate the proposed sediment and emergent vegetation removal and to reduce potential impacts to California red-legged frog, suction hydraulic equipment may be used in consultation with the USFWS and CDFW to minimize the disturbance of sediments in the water. While generally resulting in a higher percentage of water in the excavated materials than a clamshell dredge, the use of suction hydraulic equipment generally results in less turbidity and overall disturbance at the point of use than a clamshell. In sensitive environments, the use of suction hydraulic equipment is often preferred, provided that the excavated materials and residual water are properly handled. If suction hydraulic equipment is to be used as part of this project, the slurry that is created by suction hydraulic equipment would go into a settling area until the sediments settle out and the decant water can be tested for its acidity. If the result of such testing indicates that the water is pH neutral, it would either be released into the Horse Stable Pond or pumped into

¹⁰⁵ Harry Gibbons and Robert Plotnikoff, Tetra Tech, Inc. *Technical Memorandum, Revised Review of Acid Sulfate Soils, Potential Release Mechanism, and Risk of Release in the Horse Stable Pond and Connecting Channel Sediment Removal Project. August 27, 2013* (“Acid Sulfate Soils Technical Memorandum”).

¹⁰⁶ U.S. Fish and Wildlife Service (USFWS), *In Reply Refer To: 08ESMF00-2012-F-0082-2, Formal Endangered Species Consultation on the Sharp Park Safety, Infrastructure Improvement, and Habitat Enhancement Project in San Mateo County, California, October 2, 2012* (“Biological Opinion”).

the Pacific Ocean.¹⁰⁷ No permit is required for discharges from the Laguna Salada Wetland Complex into the Pacific Ocean because both the Laguna Salada Wetland Complex and the Pacific Ocean are considered “waters of the United States” under the federal Clean Water Act. However, should any permit be required by SFBROWCB or any other resource agency for the proposed SNRAMP project, SFRPD will seek such a permit and comply with any and all conditions that are attached to the permit,¹⁰⁸ as already indicated by Table 3, Potentially Required Regulatory Approvals, p. 81.

Sediment Testing and Mitigation

The commenter also indicated that sediment testing and mitigation at Sharp Park was impermissibly deferred to a future permitting process as part of a programmatic, rather than project-related, mitigation measure. While Impact HY-3 indicates that the SFRPD would be required to obtain a Section 401 water quality certification and implement Draft EIR Mitigation Measure M-HY-1, Implementation of Stormwater Pollution Prevention Measures, p. 366; Mitigation Measure M-BI-12a, Protection of Wetlands during the Sharp Park Restoration Project, p. 339; and Mitigation Measure M-BI-12b, Laguna Salada Restoration Project Wetland Mitigation Plan, p. 340, which are all programmatic in nature and identify measures to avoid, minimize, and restore affected wetlands and waters of the state, and require preparation of a stormwater pollution prevention plan, there are other project-related mitigation measures provided in the Draft EIR (as amended in this RTC document) that relate to sediment testing, analysis, and remediation. As stated on Draft EIR p. 96, Sharp Park is evaluated at a project level of detail; therefore, Draft EIR Mitigation Measure M-BI-6a, Protection of Protected Species during Implementation of the Sharp Park Restoration Project, p. 326, which is presented under “Project-level Impacts (Sharp Park Restoration)” and provides specific measures for sediment testing, analysis, and remediation at Sharp Park, is also a project-specific mitigation measure. This mitigation measure indicates the need for consultation with various resource agencies, and, as required by law, it is assumed that SFRPD would obtain any and all necessary permits for the proposed activities. Mitigation Measure M-BI-6a, Protection of Protected Species during Implementation of the Sharp Park Restoration Project, p. 326, provides the required level of specificity and detail for sediment testing and mitigation, including specific performance standards, such that mitigation is not deferred.

Alternative Methods of Habitat Enhancement

Refer to Response AL-11, RTC p.4-600, for a discussion of alternative methods of habitat enhancement (other than dredging), such as modification of lagoon water level and flooding management.

¹⁰⁷ San Francisco Planning Department, *Sharp Park Safety, Infrastructure Improvement, and Habitat Enhancement Project Final Mitigated Negative Declaration*, January 17, 2014, p. 88.

¹⁰⁸ San Francisco Planning Department, *Sharp Park Safety, Infrastructure Improvement, and Habitat Enhancement Project Final Mitigated Negative Declaration*, January 17, 2014, p. 103.

Wetlands in the Northeastern Portion of the Lagoon

Refer to Response BI-25, RTC p. 4-424, for a discussion of wetlands in the northeastern portion of the lagoon.

Summary

Because the comments addressed in this response (Baye-1-14) covers all of the commenter's previous comments, refer also to Response BI-25, RTC p. 4-424; Response HY-5, RTC p. 4-501; Response AL-11, RTC p. 4-600; Response G-9, RTC p. 4-37; Response HY-2, RTC p. 4-493; Response BI-8, RTC p. 4-382; and Response BI-10, RTC p. 4-384.

Comment BI-8	Cost of off-site disposal of dredged material
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The response to Comment BI-8 addresses all or part of the following individual comment:

Baye-1-10

- **3. The report's design and estimated costs of the "full restoration" alternative are unrealistic, grossly inflated, and inconsistent with professional wetland restoration precedents of lagoon restoration.**

The conceptual alternatives report arbitrarily assumes that excavated soils for "full restoration" of wetlands would require off-site disposal (p. 53). Off-site fill disposal is a principal cost factor for the full restoration alternative. The off-site disposal assumption is invalid. I have designed wetlands and provided peer review services for innumerable coastal wetland restoration plans during the last 20 years, and I know of no coastal wetland restoration plan that has made this assumption.

Only plans for the most constrained coastal wetland restoration sites consider off-site fill disposal as a last resort. Balancing cut/ fill to the greatest extent possible, minimizing fill import or export to the extent feasible, is a standard planning objective for restoration feasibility. The report failed to consider beneficial re-use applications of locally excavated sediments, including obviously needed ones like flood control berms or platforms, upland/wetland and riparian transition zones, and upland refuge mounds peripheral to wetlands. [Baye-1-10]

Response BI-8

This comment questions the cost of off-site disposal of dredged material for an alternative considered but rejected from further evaluation. For the reasons discussed on Draft EIR pp. 526 to 527, which conclude alternative would result in greater significant unavoidable impacts, this alternative was not evaluated in the EIR.

With regards to the proposed project, Draft EIR p. 100 indicates that off-site disposal of all of the dredged material from Sharp Park would not occur. Instead, most of the material would be used on-

site and approximately 20,000 cubic yards would be stockpiled or spread at the Sharp Park rifle range site or disposed of at the Sharp Park organic dump.

Off-site disposal was considered in the Sharp Park Conceptual Restoration Alternative Report for the No Golf Alternative, but it was found to be substantially more costly and it would require a significant number of truck trips to dispose of the dredged material in an off-site location. For the SNRAMP, given that much of the current golf course configuration would be maintained, the excavated material was determined to be suitable for use on site for both golf course substrate and restoration activities; therefore, the SNRAMP assumed that all material would be reused on-site.

Refer also to Response G-4, RTC p. 4-29, which reflects that a cost analysis for the project isn't germane with respect to a CEQA analysis.

Comment BI-9 Contamination from dog urine

The response to Comment BI-9 addresses all or part of the following individual comment:

Kushner-1-06

- Another oddity in dEIR is that with all of the attention the voluminous document gives to dogs, nowhere is dog urine mentioned. Good people do “pick up after” their dogs, but certainly not the urine. With an estimated 130,000 dogs in San Francisco, dog urine is an environmental hazard to many, many plants. Surely this oversight in the dEIR is unintentional, but it should be corrected. [Kushner-1-06]

Response BI-9

This comment questions whether dog urine could present hazardous conditions for plants.

Implementation of the SNRAMP would reduce off-leash dog use in order to maintain and enhance sensitive plants and wildlife. The DPAs and trails within the Natural Areas are generally located away from sensitive habitats. The proposed project does not include any actions or elements that would be expected to significantly increase the number of dogs within Natural Areas. Therefore, the proposed project is not anticipated to result in a substantial increase in the amount of dog urine, whether or not this urine may or may not have adverse impacts to plant species.

However, with respect to the potential impacts caused by dog urine, which is part of the existing conditions, the fundamental problem is related to the nitrogen content of urine and its uptake by plants, whether native, nonnative, ornamental, or even lawns. There are no widely available studies that specifically address the impacts of dog urine on native plants, although there are studies that

address potential impacts on lawns.¹⁰⁹ These studies affirm that lawn damage can occur as a result of nitrogen contained in dog urine. To avoid potential impacts, the primary method is to restrict dogs through the use of leashes, fencing, or other methods to control where dogs may urinate. If impacts were to occur, whether related to dog urine or any other factor that could influence the success of the program, as stated on Draft EIR pp. 94 to 96, the SNRAMP includes a Monitoring Plan to evaluate the success of revegetation activities and Draft EIR p. 90 describes the adaptive management approach that would be undertaken to reassess and improve the activities proposed under the SNRAMP on an ongoing basis.

Refer also to Response G-25, RTC p. 4-106, which states that Mitigation Measure M-BI-1a, Protection of Protected Species and Riparian and Wetland Habitat, Draft EIR p. 298 calls for the SFRPD to continue to evaluate the impacts of DPAs and, where substantial adverse impacts to special-status species are confirmed, SFRPD shall take actions to protect those species.

Comment BI-10	Role of fertilizers on lagoon wetlands
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The response to Comment BI-10 addresses all or part of the following individual comment:

Baye-1-12

- Furthermore, the report ignores the obvious role of golf course and residential fertilizer contamination of lagoon wetlands as a factor in overgrowth of tule marsh (reduction in open water edge). [Baye-1-12]

Response BI-10

This comment addresses the role of fertilizers on the lagoon wetlands.

While the proposed SNRAMP project, which includes future restoration activities at Sharp Park, is entirely separate and independent from the existing and ongoing operation of the adjacent golf course and/or residential uses, as discussed in Response PD-13, RTC p. 4-175, the Biological Opinion¹¹⁰ for the Sharp Park Safety, Infrastructure Improvement, and Habitat Enhancement Project places limitations on the use of pesticides at the golf course. Biological Opinion p. 15 states that “During the 10 year duration of the Project, only organic fertilizers, such as pro-biotics, blood meal, lime, and compost tea, will be used at Sharp Park, and they will only be applied to the greens, tees and surrounds. No fertilizers will be applied to fairways.” The same page of the Biological Opinion

¹⁰⁹ Dr. Steve Thompson, DVM, “Dog-On-It” Lawn Problems, Texas A&M Agrilife Extension; A.W. Allard, Lawn burn and dog urine, *Canine Practice* (March/April 1981), 8 (2): 26–32. This document is available online at: http://aggie-horticulture.tamu.edu/archives/parsons/turf/Dog_lawn_problems.html, accessed June 7, 2016.

¹¹⁰ A Biological Opinion is issued by the USFWS to provide written documentation of the agency’s opinion as to whether a project is likely to jeopardize a listed species or destroy or adversely modify a listed species’ critical habitat. At issue for the SNRAMP project was whether there would be effects to the federally threatened California red-legged frog (*Rana draytonii*), the endangered San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), and the endangered mission blue butterfly (*Icaricia icarioides missionensis*).

goes to say that “During the 10 year duration of the Project, the City will not use any chemical pesticides on the golf course or associated landscaped areas at Sharp Park. Golf course pests and weeds will be controlled either by hand weeding or promoting healthy soil ecosystems.” It is likely that similarly prohibitions will be identified in the Biological Opinion for the Sharp Park Restoration project to similarly ensure or increase the change of restoration success well.

Comment BI-11	SNRAMP use of native vs. nonnative/invasive plants in terms of habitat diversity and the ability to support native or sensitive species
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The response to Comment BI-11 addresses all or part of the following individual comment:

SFFA-3-14

- The DEIR states repeatedly throughout the document that habitat will be improved by the eradication of non-native plants and the presumed replacement by native plants. In fact this is offered as the basis for most claims in the DEIR that the “restoration” project will not harm the environment. For example, although the DEIR acknowledges that the environment may be harmed by the methods used to eradicate non-native plants, this harm is theoretically mitigated by the claim that the eventual development of native habitat will compensate for that harm. These claims are not supported by either the reality of restoration efforts in the past 15 years or by scientific evidence which does not substantiate a claim that native vegetation provides habitat for animals that is superior to non-native vegetation.

Although non-native vegetation has been removed repeatedly in many natural areas, the native plants that are planted in their place rarely persist for longer than a few months. These newly planted areas are quickly over run by non-native weeds. We will provide examples of such failed “restorations” in a subsequent section of this comment (Part V).

More importantly, neither SNRAMP nor the DEIR provide any scientific evidence to support the contention that native vegetation provides superior habitat to animals. In fact, all available scientific evidence contradicts this claim.

Because eucalyptus trees are one of the primary targets for eradication, we will focus on the specific claim that the eucalyptus forest is a “biological desert.” We are frequently told that “nothing grows” under the eucalypts and that they are not providing food or habitat to insects, birds, and other animals.

Professor Dov Sax (Brown University) tested these claims while a student at UC Berkeley. **He studied the eucalyptus forest in Berkeley, California, and compared it to native oak-bay woodland in the same location. He found little difference in the species frequency and diversity in these two types of forest.**

He studied six forests of about 1 hectare each, three of eucalypts and three of native oaks and bays in Berkeley, California. The sites were not contiguous, but were selected so that they were of similar elevation, slope, slope orientation, and type of adjacent vegetation. He conducted inventories of species in spring and autumn. He counted the number of:

- > Species of plants in the understory

- > Species of invertebrates (insects) in samples of equal size and depth of the leaf litter
- > Species of amphibians
- > Species of birds
- > Species of rodents

He reported his findings in Global Ecology and Biogeographyⁱⁱ:

“Species richness was nearly identical for understory plants, leaf-litter invertebrates, amphibians and birds; only rodents had significantly fewer species in eucalypt sites. Species diversity patterns ... were qualitatively identical to those for species richness, except for leaf-litter invertebrates, which were significantly more diverse in eucalypt sites during the spring.”

Professor Sax also surveyed the literature comparing biodiversity in native vs non-native forest in his article. He reports similar findings for comparisons between non-native forests and local native forests all over the world:

In Spain, species of invertebrates found in the leaf-litter of eucalyptus plantations were found to be similar to those found in native forests, while species richness of understory plants was found to be greater in the native forests.

In Ethiopia the richness of understory species was found to be as great in eucalyptus plantations as in the native forest.

In the Mexican state of Michoacan, species richness and abundance of birds were found to be similar in eucalyptus and native forests.

In Australia species richness of mammals and of soil microarthropods were found to be similar in native forests and in non-native forests of pine.

The only caveat to these general findings is that fewer species were found in **new** plantations of non-natives less than 5 years old. This helps to illustrate a general principle that is often ignored by native plant advocates. That is, that **nature and its inhabitants are capable of changing and adapting to changed conditions. In the case of non-native forests in the San Francisco Bay Area, they have existed here for over 100 years. The plants and animals in our forests have “learned” to live in them long ago.**

The scientific literature informs us that wildlife does not necessarily benefit from native plant restorations and sometimes they are harmed by them. The assumption that native animals are dependent upon native plants underestimates the ability of animals to adapt to changing conditions.

Art Shapiro (UC Davis) has been studying California butterflies for over 35 years. His own observations as well as the work of other scientists have informed him that “... **the extensive adoption of introduced host plants has clearly been beneficial for a significant segment of the California butterfly fauna, including most of the familiar species of urban, suburban and agricultural environments. Some of these species are now almost completely**

dependent on exotics and would disappear were weed control more effective than it currently is.”ⁱⁱⁱ

He explains that this is particularly true on the coast of California because this is where the highest concentration of introduced species of plants is naturalized and the butterfly population is less diverse because of the cool, foggy climate. There are apparently few non-native plants in the desert and alpine regions of California and so butterflies in those regions have not had the opportunity or need to adapt to new plants.

Professor Shapiro also speculates in this study that **other insects have adapted to non-native plants as well:** “Introduced hosts, having a broader geographic range than native hosts, may permit the expansion of the insect population geographically.”

Birds have also adapted to non-native plants and trees. Researchers at UC Davis surveyed over 1,000 ornithologists in 4 states, including California, about their observations of native birds and non-native plants. Responses from 173 ornithologists reported 1,143 “interactions” of birds with introduced plants considered invasive. Forty-seven percent (47%) of those interactions were birds eating the fruit or seeds of non-native plants and trees considered invasive. Other interactions were nesting, perching, gleaning [eating insects], etc. ^{iv}

Interactions were frequently reported in non-native blackberry, which is found in most parks in San Francisco. It is one of the most productive food sources for birds in San Francisco. Unfortunately, it is being eradicated by the Natural Areas Program along with a long list of non-native shrubs which provide food and cover, such as cotoneaster, fennel, etc. The loss of food and cover has a drastically negative impact on the animals that live in our parks.

The non-native blackberry also provides cover for wildlife. It is an impenetrable bramble both physically and visually. Birds and small mammals hide and make nests and dens in these thickets. Coyotes are resident in San Francisco. The thick undergrowth which has been removed in some parks by the Natural Areas Program now allows unleashed dogs to pursue them in areas where they were protected before. If the safe havens of urban wildlife are destroyed, the animals may seek shelter elsewhere, a move that may be dangerous for them. When animals move into residential neighborhoods they are considered a nuisance and are often killed.

Native plant restorations also require the use of herbicides to eradicate non-native trees and plants. Herbicides are being sprayed in the blackberries and other berry-producing non-native plants which are a major food source for wildlife. **One study performed by the US Forest Service for the EPA reported that the use of Garlon significantly reduced the reproductive success of birds.^v Garlon is also highly toxic to aquatic life.**

Finally, we provide a current and local example of the scientific evidence that native plants do not provide habitat that is superior to that provided by non-native plants. The California Academy of Sciences finds that several years after planting its roof with native plants, it is now dominated by non-native species of plants in the two quadrants that are not being weeded, replanted and reseeded with natives. **Their monitoring project recently reported that there were an equal number of insect species found in the quadrants dominated by**

native plants and those dominated by non-native plants. Where equal numbers of insects are found, we can expect to find equal numbers of birds and other animals for which insects are food.

The final EIR must provide scientific evidence that native plants provide superior habitat for wildlife. If it is unable to provide such evidence, these claims must be removed from the final EIR. Without such reassurances, the final EIR must conclude that the eradication of non-native plants will have a significant negative impact on the biological resources in San Francisco's natural areas. [SFFA-3-14]

Response BI-11

These comments focus on whether native vegetation provides superior habitat to nonnative and/or invasive vegetation.

Some of the expressed goals and objectives of the SNRAMP are to maintain and enhance native plant and animal communities; reestablish native community diversity, structure, and ecosystem function where degraded; and promote the functioning of San Francisco's native ecosystem, including the maintenance of native biodiversity; therefore, the proposed project seeks to maintain and enhance native species rather than maintain and/or expand the use of the Natural Areas for nonnative species.

Response G-12, RTC p. 4-60, provides the definition of invasive species that is contained in Executive Order 13112, which is a species that is nonnative (or alien) to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.¹¹¹ A majority of nonnative species cause no harm (meaning they are not invasive), and some are even beneficial. In contrast, invasive species in the Natural Areas, have a detrimental effect on native habitats by outcompeting the native species, thus creating a monoculture, which reduces biodiversity (see IUCN Guidelines for the Prevention of Biodiversity Loss Caused by Alien Invasive Species). In fact, the California Invasive Plant Council states that:

"When plants that evolved in one region of the globe are moved by humans to another region, a few of them flourish, crowding out native vegetation and the wildlife that feeds on it. Some invasives can even change ecosystem processes such as hydrology, fire regimes, and soil chemistry. These invasive plants have a competitive advantage because they are no longer controlled by their natural predators, and can quickly spread out of control. In California, approximately 3% of the plant species growing in the wild are considered invasive, but they inhabit a much greater proportion of the landscape."¹¹²

Invasive species often compete so successfully in new ecosystems that they displace native species and disrupt important ecosystem processes. Invasive species are capable of displacing native species

¹¹¹ www.invasivespeciesinfo.gov/docs/council/isacdef.pdf, accessed on September 14, 2015.

¹¹² <http://www.cal-ipc.org/ip/definitions/index.php>, accessed on August 7, 2014.

either because they are adapted to similar climatic conditions, they lack predators or pests, or they have other characteristics that allow them to thrive. If left alone, the Natural Areas would contain only a handful of native plants, and the animals that rely on a diversity of flora could go extinct.¹¹³

As stated on Draft EIR p. 296, invasive species removal projects would replace invasive trees and other vegetation with native plants, thus improving native habitats and reducing competition from invasive species. Additionally, one of the primary goals of the SNRAMP is to protect and restore sensitive habitats; to this end, the SNRAMP includes recommended actions for augmenting special-status plant populations, such as Recommended Actions VP-1d (Augment existing sensitive plant populations) and EM-1d (Augment existing sensitive plants to prevent extinction of rare or uncommon plant species), which recommends augmenting sensitive plant populations to prevent extinction of rare or uncommon plants, and CH-1c (Reintroduce populations of rare plant species to help prevent local extinctions of these species in San Francisco), which recommends reintroducing populations of rare plant species. As a result, protected plant species populations may increase; thus, long-term impacts on protected plant species from vegetation removal are anticipated to be beneficial. Draft EIR p. 304 similarly concludes that replacing existing invasive trees and other vegetation with native plants may increase populations of protected bird species. Beneficial impacts as a result of increasing native habitat was also identified for the California red-legged frog (Draft EIR p. 310), San Francisco garter snake (Draft EIR p. 311), western pond turtle (Draft EIR p. 312), sensitive status species (Draft EIR p. 312), and sensitive natural communities (Draft EIR p. 330).

As stated in Section V.G.3 (Biological Resources, Impacts), Draft EIR pp. 290 to 344, while the removal of invasive species could result in short-term impacts to terrestrial wildlife, aquatic species, and/or sensitive plants or plant communities, replacing the vegetation with native plants would improve native habitat conditions, reduce competition from invasive species, and increase biodiversity. Refer also to Response BI-13, RTC p. 4-397, for a more detailed discussion of short-term impacts that could occur and the various mitigation measures recommended in the Draft EIR to ensure that impacts are reduced to a less-than-significant level.

As more fully discussed in Response G-2, RTC p. 4-15, the Recreation and Open Space Element (ROSE) of the City's General Plan (updated in April 2014) requires the City to protect and enhance the biodiversity, habitat value, and ecological integrity of open spaces and encourage sustainable practices in the design and management of the City's open space system (Objective 4). In addition, refer to Response PD-11, RTC p. 4-159, for a discussion of the City's other policy guidance that supports the protection and maintenance of biodiversity within the Natural Areas, including the SNRAMP itself and the San Francisco Department of the Environment's Biodiversity Program including guidance provided in the City's *Sustainability Plan* regarding the protection of Natural Areas in San Francisco. Refer also to Response HZ-1, RTC p. 4-531, for a discussion of the various

¹¹³ <http://sfrecpark.org/parks-open-spaces/natural-areas-program/natural-areas-faqs/>, accessed on August 6, 2014.

ways that the SFRPD controls, monitors, and uses herbicides/pesticides and eliminates or reduces impacts on wildlife, and Refer to Response BI-13, RTC p. 4-397, for a discussion of potential impacts of the proposed project on bird populations, other animals, and insects; that planting native plants does not compensate for impacts; and that native plants are not as valuable as invasive species.

In summary, the EIR accurately and fully analyzes and discloses the impacts of the SNRAMP project, specifically with respect to impacts to sensitive species and common species, and the impacts associated with the removal of invasive vegetation, as raised by the commenters.

Comment BI-12 Tree removal at Mount Davidson

The response to Comment BI-12 addresses all or part of the following individual comments:

MPIC-1-03

MPIC-1-04

MPIC-2-12

WTPCC-1-02

- However, even the environmental effect of the proposed removal of 1600 trees is not satisfactorily studied by the draft EIR. For one thing, the projected number of 1600 trees to be removed does not represent all of the trees that would be removed from this historic Sutro forest, because additional trees will have to be removed for reasons not included in the MRA, such as the SFPUC tank and other utility projects, storm damage, and tree death due to age and/or lack of maintenance. [MPIC-1-03]
- To us, the goal of all of the SNRAMP alternatives for Mt. Davidson Park appears to be to deter public recreational use of this Park and make large portions of it into an oak and prairie landscape. This goal is unacceptable to the neighborhood of Miraloma Park, which borders on the Mt. Davidson forest and for which this forest is a major recreational resource and therefore a mainstay of our quality of life and property values. This goal is also inconsistent with historic Park uses and the original status of Blue Mountain, later renamed Mt. Davidson (see below). [MPIC-1-04]The projected 1600 trees to be removed does not represent all of the trees that would be removed from this historic forest. Additional trees will and have been removed for reasons not addressed, such as the SFPUC tank and pipeline upgrade, installation of utility lines, storm damage, vandalism, and tree death due to age and/or lack of maintenance. The Natural Areas Program does not document how many trees have been removed from the forest already, and so the 1600 goal is a moving target and is unenforceable. Approximately 100 trees were removed in 2008 to move the Mt. Davidson pipeline from the native plant area to the area designated for forest preservation. Only 5 replacement trees were planted.

The evident goal of the SNRAMP for Mt. Davidson Park is to deter public recreational use and to double the existing native plant area of the park by converting a third of the forest area (10.2 acres) into a prairie/coastal scrub landscape. The SNRAMP estimate of 353 trees per acre on Mt. Davidson is half of that estimated by UCSF for their forest on Mt. Sutro, which is similar in density and age. The SNRAMP forest management goals of 50-100 square feet of basal area per acre in the MA-1 area would leave only 23-46 trees per acre, assuming an average tree diameter of 20 inches; 100-200 sqf basal area for MA-2 would leave 46-92

average 20-inch trees per acre and just 92-275 trees of this average size per acre in the MA-3 forest zone. The result would be even more than 1600 trees permanently removed, especially if the total trees per acre are now closer to 750 than 350. This goes beyond “thinning ... to improve the health of the forest by relieving crowding,” as the DEIR describes the plan. No evidence is provided that this extensive clearing will improve the health of the forest. In any case, such major clearing is unacceptable to the neighborhood of Miraloma Park, which borders on the Mt. Davidson forest and for which this forest is a prime recreational resource and a mainstay of our quality of life and property values. [MPIC-2-12]

- WTPCC opposes NAP plans to remove healthy trees simply because they are non-native or simply to allow more sunlight to reach newly planted, sun-loving natives on the forest floor. We fully support the removal of hazardous trees in our parks, but NAP’s plans go far beyond that.

We are concerned that the actual number of trees removed will be much higher than the 18,500 listed. NAP does not include any trees or saplings less than 15 feet tall in its count of trees to be removed, yet the SNRAMP makes clear that these “smaller” trees or saplings will be cut down along with the taller ones. A 2007 US Forest Service report noted that just over half (51.4%) of the trees in San Francisco are less than six inches in diameter at breast height. This diameter corresponds to a tree less than 15 feet in height. The removal of these smaller trees will significantly amplify the impact of the removal of the taller trees on aesthetics, erosion, and windthrow in natural areas, yet the Draft NAP DEIR did not consider these additional impacts.

WTPCC is concerned that claims in the Draft DEIR that trees cut down will be replaced on a one-to-one basis by native trees are misleading. The SNRAMP makes no promise to replace trees. In particular, the SNRAMP specifically states that the 15,000+ trees removed at Sharp Park will not be replaced since the natural area will be converted to coastal scrub. In addition, there were few native trees in San Francisco before the Europeans settled the area; the climate was too harsh. Native trees do not grow well in the windy, foggy, sandy or rocky soils present in most natural areas. For example, about a decade ago, NAP planted 25 oak trees at Tank Hill to replace 25 trees cut down by NAP. Only 5 of the replacement oak are still alive, and only one of those has grown.

Our concerns about the 1,600 tree removals planned for Mt. Davidson in particular include:

- > Increased erosion from the loss of the trees
- > Increased water runoff during storms and the potential for damage to park neighbors’ property from the water or mudslides
- > These concerns were not adequately addressed in the DEIR. [WTPCC-1-02]

Response BI-12

These comments express concern about tree removal at Mount Davidson, including the cumulative impacts of tree removal at Mount Davidson in combination with a 2008 tank and pipeline upgrade conducted by SFPUC, which resulted in the removal of 100 trees. Some comments express concern

that the SNRAMP actually proposes much more tree removal than indicated in the Draft EIR; questions the outcome of previous revegetation efforts; and identifies potential impacts of tree removal on erosion, increased runoff during storms and mudslides, windthrow, and aesthetics.

CEQA requires than an EIR evaluate the environmental impacts of a proposed project based on the existing conditions as they exist at the time of the Notice of Preparation (NOP) (CEQA Guidelines Section 15126.2). With regards to the SFPUC Tank and Utility Relocation Project, this project was associated with the seismic retrofit of the water system on Mount Davidson. According to SFPUC, up to 30 trees were removed as part of the project that was implemented in August 2008. While the NOP for the proposed project was published in April 2009, the effects of the SFPUC Tank and Utility Relocation Project in terms of tree removal have already occurred and are already included as a past project for purposes of the cumulative analysis for the SNRAMP project. Presently unknown additional tree removal actions (such as storm-damage related tree removal) cannot be predicted; analysis of any associated impacts would be speculative and is not required in accordance with CEQA Guidelines Section 15064.

The Draft EIR addresses the removal of 1,600 trees at Mount Davidson in several places under Section V.G.3, Impacts, including Impact BI-1, Impact BI-3, and Impact BI-7. The number of trees in the Natural Areas was determined using a Global Positioning system “on-the-ground,” with the data uploaded to SFRPD’s GIS system. The trees were surveyed systematically and consistently, and the number of trees per acre that currently exist in Natural Areas was determined to be about 353 trees/acre as described on SNRAMP p. F-5 and F-6. The estimate of 1,600 trees to be removed at Mount Davidson is based on this estimate of existing trees and the target thinning conditions (50- to 100-square-foot basal area for MA-1 and 100- to 200-square-foot basal area for MA-2) described in SNRAMP Appendix F. This estimate of trees includes small trees (saplings that are 15 feet high or greater). As stated in Draft EIR Chapter III, Project Description, p. 112, General Recommendation GR-15c, tree removal would focus on dead or dying trees, trees with disease or insect infestations, storm-damaged or hazardous trees, and trees that are suppressed because of overcrowding. Other recommendations intended to improve the health of the urban forest are described in Draft EIR Chapter III, Project Description, p. 112, under General Recommendations GR-15a to GR-15h.

The proposal, as put forth in the Project Description and which forms the basis for the environmental analysis in the Draft EIR, is to remove 1,600 trees (defined as any tree 15 feet or taller, which includes taller saplings) at Mount Davidson. The commenter is correct in that the purpose of removing these trees is to enhance the existing grasslands and prairie-scrub habitat. The Draft EIR accurately describes proposed tree removal and replacement on Draft EIR pp. 92 to 93 and throughout the document. As stated on Draft EIR p. 92:

“[i]nvasive trees removed in San Francisco would be replaced with native tree species at a ratio of roughly one-to-one, although not necessarily at the same location or within the

same Natural Area ... For Sharp Park in Pacifica, many of the trees would be replaced not with trees but with more appropriate native vegetation, specifically coastal scrub.”

Should SFRPD propose additional tree removal not addressed in this Draft EIR, additional environmental analysis may be required in accordance with CEQA.

The commenters express concern that tree removal could have adverse impacts with respect to erosion, increased runoff during storms and mudslides, windthrow and aesthetics. These comments do not present any evidence that the proposed project would result in a significant impact that is not identified in the Draft EIR. The potential for tree removal to result in erosion impacts and adverse effects from runoff during storms is addressed in Draft EIR Section V.H, Hydrology and Water Quality, and was determined to be less than significant with mitigation and implementation of proposed best management practices (described on Draft EIR pp.93 to 94) and General Recommendations GR-12a and GR-12b (described on Draft EIR p.111). Draft EIR Mitigation Measure M-HY-1, Implementation of Stormwater Pollution Prevention Measures, p. 366, includes numerous requirements to avoid and reduce erosion and stormwater impacts and would be implemented in addition to best management practices for erosion control as identified in General Recommendations GR-12a and GR-12b. The effects of tree removal on potential windthrow are addressed in Draft EIR Section V.E, Wind and Shadow, under Impact WS-1, Impact WS-2, Impact WS-3, and also are addressed in Section V.I, Hazards and Hazardous Materials, under Impact HZ-1, Impact HZ-3, and Impact HZ-5. The Draft EIR determined these impacts to all be less than significant. Aesthetic impacts of tree removal are addressed in Section V.C, Aesthetics, under Impact AE-1 to Impact AE-9, and were determined to be less than significant.

Comment BI-13	Potential impacts of implementing the proposed habitat restoration and other management and maintenance actions on biological resources
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The response to Comment BI-13 addresses all or part of the following individual comments:

GGAS-1-30	MPIC-2-27	Art-1-03
Cook-1-03	Delacroix-1-03	Fox-1-03
Garber-1-03	Jungreis-1-03	Keating-1-02
Kessler-1-03	Kessler-2-03	Ray-1-03

- To the extent that maintenance activities will have impacts on birds and other sensitive species, Golden Gate Audubon believes that as long as best management practices are in place, monitored, and enforced, impacts to native species should be minimized. (See DIER, at 313-316) For example, trail-clearing, maintenance, or tree cutting during the breeding season should follow protocols identified in the DEIR to avoid disturbance to breeding birds or other animals. [GGAS-1-30]
- **The forest in Mt. Davidson Park provides important wildlife habitat. Claims that habitat for animals is improved by the eradication of non-native plants are unsupported by scientific evidence.**

The DEIR states repeatedly that habitat will be improved by the eradication of non-native plants and their presumed replacement by native plants. This statement is offered support for most claims in the DEIR that the “restoration” project will not harm the environment. For example, although the DEIR acknowledges that the environment may be harmed by the methods used to eradicate non-native plants, it maintains that this harm will, theoretically, be mitigated by the eventual development of native habitat that will compensate for that harm. This claim is not supported either by the reality of restoration efforts in the past 15 years or by scientific evidence, which does not substantiate a claim that native vegetation provides superior habitat for animals than non-native vegetation.

Although non-native vegetation has been removed repeatedly in many natural areas, the native plants that are planted in their place rarely persist for longer than a few months. These newly planted areas are quickly over-run by non-native weeds. More importantly, neither SNRAMP nor the DEIR provide any scientific evidence to support the contention that native vegetation provides superior habitat for animals. In fact, all available scientific evidence contradicts this claim. Eucalyptus trees are one of the primary targets for eradication because of claims that the eucalyptus forest is a “biological desert,” that “nothing grows” under eucalypts, and that they provide neither food nor habitat to insects, birds, and other animals. Professor Dov Sax (Brown University) tested these claims while a student at UC Berkeley. **He compared the eucalyptus forest in Berkeley with native oak-bay woodland in the same location and found little difference in species frequency or diversity in these two types of forest.**

Sax studied 6 forests of about 1 hectare each, 3 of eucalypts and 3 of native oaks and bay trees. The sites were not contiguous, but were of similar elevation, slope, slope orientation, and type of adjacent vegetation. Inventories in spring and autumn counted species of plants and in the understory and insects in samples of equal size and depth of leaf litter, as well as amphibians, birds, and rodents.

“Species richness was nearly identical for understory plants, leaf-litter invertebrates, amphibians and birds; only rodents had significantly fewer species in eucalypt sites. Species diversity patterns ... were qualitatively identical to those for species richness, except for leaf-litter invertebrates, which were significantly more diverse in eucalypt sites during the spring.” (Sax, 2002)

Sax also surveyed the literature comparing biodiversity in native versus non-native forest and reported similar findings for comparisons between non-native forests and local native forests all over the world:

In Spain, species of invertebrates found in the leaf-litter of eucalyptus plantations were similar to those found in native forests, while species richness of understory plants was greater in the native forests.

In Ethiopia, the richness of understory species was as great in eucalyptus plantations as in the native forest.

In Michoacán, Mexico, species richness and abundance of birds were similar in eucalyptus and native forests.

In Australia, species richness of mammals and of soil microarthropods were similar in native forests and in non-native forests of pine.

The only caveat to these general findings is that fewer species were found in **new** plantations of non-natives less than 5 years old. This illustrates a general principle that is often ignored by native plant advocates, that nature **and its inhabitants are capable of changing and adapting to changed conditions**. Non-native forests in the San Francisco Bay Area have been here for over 100 years. The plants and animals in our forests have “learned” to live in them long ago.

Wildlife does not necessarily benefit from native plant restorations and sometimes is harmed by them. The assumption that native animals are dependent upon native plants underestimates the ability of animals to adapt to changing conditions. Art Shapiro (UC Davis), who has studied California butterflies for over 35 years, has observed along with other scientists that

“...the extensive adoption of introduced host plants has clearly been beneficial for a significant segment of the California butterfly fauna, including most of the familiar species of urban, suburban and agricultural environments. Some of these species are now almost completely dependent on exotics and would disappear were weed control more effective than it currently is.” (Graves & Shapiro, 2003)

Shapiro explains that this is particularly true on the coast of California, where the highest concentration of introduced species of plants is naturalized and the butterfly population is less diverse because of the cool, foggy climate. There are fewer non-native plants in the desert and alpine regions of California, so butterflies in those regions have not had the opportunity or the need to adapt to new plants.

Shapiro speculates in this study that **other insects have adapted to non-native plants as well**: “Introduced hosts, having a broader geographic range than native hosts, may permit the expansion of the insect population geographically.”

The non-native blackberry provides cover for much wildlife. It is an impenetrable bramble both physically and visually. Birds and small mammals hide and make nests and dens in these thickets. Coyotes are resident in San Francisco. The thick undergrowth removed in some parks by the NAP now allows unleashed dogs to pursue coyotes in areas where they were protected before. If the safe havens of urban wildlife are destroyed, the animals may seek shelter elsewhere, a move that may be dangerous for them.

Birds have adapted to non-native plants and trees. Researchers at UC Davis (Aslan & Rejmanek, 2010) surveyed over 1,000 ornithologists in 4 states, including California, about their observations of native birds and non-native plants. Reports from 173 ornithologists included 1,143 “interactions” of birds with introduced plants considered invasive. Of those interactions, 47% were birds eating the fruit or seeds of non-native plants and trees

considered invasive. Other interactions included nesting, perching, gleaning [eating insects], etc.^{iv}

Interactions were frequently reported in non-native blackberry, found in most parks in San Francisco, and one of the most productive food sources for birds in San Francisco. Unfortunately, it is being eradicated by the Natural Areas Program because it is non-native.

Mt. Davidson currently has a large and healthy distribution of birds (114 species found from 5/31/11 - 6/1/12; see Attachment E), 90% of which rely on trees and forest for food, safety, and a place to breed. Because of the nature of their current habitat, none of the species present on Mt. Davidson are threatened or of special concern. The data presented in table 6-2-2 (Sensitive species known to occur at Mount Davidson) of the SNRAMP is incorrect. No empirical data were used and cited in the conclusions of the DEIR. Bird information cited were opinions submitted by the Golden Gate Audubon Society, an amateur lobbying group located in Alameda County that is known to have special interests.

No explanation is provided of the term "Species of Local Concern (SLC)" used in Table 6-2-2. Does the Federal and State or local government recognize this as a legitimate and legal conservation status? None of the 18 species listed in table 6-2-2 is considered either threatened or endangered by Federal, State, or local authorities or experts. All of the 18 species are listed as "Species of Least Concern" by the International Union for the Conservation of Nature (IUCN). San Francisco Field Ornithologists (SFFO), an organization that collects and publishes data about local birds, considers nine of the birds listed in table 6-2-2 as "seen on most bird outings." The other ten species are described as "common; abundant; expected to be seen on every outing in moderate or large numbers." If Table 6-2-2 is meant to convey the impression that birds are doing poorly in the current environment of Mt. Davidson, it fails to demonstrate this factually. On the contrary, Mt. Davidson hosts a habitat where birds are not threatened but live and prosper in abundance.

Native plant restorations also require the use of herbicides to eradicate non-native trees and plants. Herbicides are being sprayed on blackberries and other berry-producing non-native plants that are a major food source for wildlife. **One study performed by the US Forest Service for the EPA reported that the use of Garlon significantly reduced the reproductive success of birds** (Marin Municipal Water District).

There is a current and local example of scientific evidence that native plants do not provide habitat that is superior to that provided by non-native plants. The California Academy of Sciences found that several years after planting its roof with native plants this roof is now dominated by non-native species of plants in the two quadrants that are not being weeded, replanted, and reseeded with natives. **Their monitoring project recently reported that there were an equal number of insect species found in the quadrants dominated by native plants and those dominated by non-native plants.** Where equal numbers of insects are found, we would expect to find equal numbers of birds and other animals for which insects are food.

The final EIR cannot reassure the public that the implementation of SNRAMP will not harm wildlife because the NAP has already violated the laws that theoretically protect wildlife.

The final EIR must prohibit the use of herbicides known to be harmful to butterflies on Twin Peaks, where the endangered Mission Blue butterfly has been reintroduced by the Natural Areas Program. [MPIC-2-27]

- San Francisco is a bird watcher's paradise. The hawks and owls that nest in monterey cypress and pine trees cannot nest in any of the four (tediously slow growing) San Francisco "native" trees. Pines and Cypress are the backbone trees of our parks. They're not only beautiful, but provide habitat for countless species of wildlife. Removing these trees because they're "not native" would be criminal. [Art-1-03] [Delacroix-1-03] [Fox-1-03] [Ray-1-03]
- San Francisco is a bird watcher's paradise. The hawks and owls that nest in monterey cypress and pine trees cannot nest in any of the four (tediously slow growing) San Francisco "native" trees. [Cook-1-03] [Jungreis-1-03]
- I visit Laguna Salada at Sharp Park frequently. The cattails at Laguna Salada provide important shelter for migratory birds from predators. Removal of cattails as [sic] proposed would result in the loss of shelter and nesting sites for birds. [Garber-1-03]
- The plan seems to confuse "native plant" restoration with "natural areas." Some areas have a current natural condition of a reasonable adaptive ecological system even if deviating from the identified preferred "native" plant base. I am concerned about short term negative impact to the current bird population as a result of the destruction required to convert the areas to the identified preferred native plant habitat. In particular, please take note of the loss of the great blue heron nesting areas caused by prior native plant area clear cutting. [Keating-1-02]
- The trees, as well as other plants targeted for removal (including blackberry brambles and vines) form valuable habitat for birds, animals and insects. By focusing on a handful of species, the needs of all the others are neglected. The areas of Native Plants do not appear to be superior habitat in general. With a few exceptions, they do not provide the cover or the food resources birds and animals need. Thousands of eucalyptus trees and thousands of cubic feet of bushy habitat are being destroyed. [Kessler-1-03] [Kessler-2-03]

Response BI-13

These comments express concern about potential impacts of the proposed project on bird populations, other animals, and insects; that planting native plants does not compensate for impacts; and that native plants are not as valuable as invasive species. Further, comments expressed concern about the sensitive species list and about the use of herbicides on wildlife, including Mission blue butterflies.

The Draft EIR identifies the potential impacts of implementing the proposed habitat restoration and other management and maintenance actions on sensitive species (Draft EIR pp. 294 to 346). As discussed on SNRAM p. 3-13, the list of special-status species discussed in the SNRAM are from a number of sources including federal and state lists as well as "watch lists" developed by local conservation organizations, pursuant to CEQA Guidelines Section 153800. These are referred to in

the Draft EIR as species of local concern (SLC). The Draft EIR evaluates the impacts to special-status species as described on Draft EIR pp. 273 to 275. The Draft EIR determines that the proposed project would have short-term impacts to birds and other sensitive species, but that, consistent with the objectives of the SNRAMP, the project would have long-term beneficial effects on biological resources, as disturbed areas would be repopulated with more diverse, native species. The SNRAMP includes General Recommendations to ensure that short-term impacts to birds are minimized. For example, the project proposes General Recommendation GR-4b, which would require that all vegetation management activities be conducted outside the breeding season for bird species (February 1 through August 31, as designated by CDFW), unless these activities had already begun before the breeding season and had already removed nesting habitat or a breeding bird survey was conducted prior to vegetation removal activities, and had determined that no nesting birds were present. If active nests (or large abandoned stick nests) are discovered as part of the breeding bird survey, a 150-foot-radius avoidance buffer would be established around the nest sites to prevent the nesting birds from being disturbed by construction activities. In addition, as described in Draft EIR Chapter III, Project Description, p. 136, the DPA in Lake Merced is proposed for closure to avoid disturbance to breeding birds.

Impact BI-2 (Draft EIR pp. 303 to 305) determines that vegetation removal could have a short-term impact on special-status bird species and identifies Draft EIR Mitigation Measure M-BI-1a, Protection of Protected Species and Riparian and Wetland Habitat, p. 298, to reduce this potential impact to a less-than-significant level. Impact BI-3 evaluates the effects of invasive weed and tree removal on other sensitive terrestrial species including protected butterfly species, the dusky-footed woodrat, and western red bat. The Draft EIR determines that short-term impacts from vegetation removal on these species would be reduced to a less-than-significant level through the implementation of Draft EIR Mitigation Measure M-BI-1a, Protection of Protected Species and Riparian and Wetland Habitat, p. 298. This mitigation measure includes requirements such as installation of temporary fencing and the use of biological monitors to limit disturbance of sensitive habitat areas and species during restoration activities such as invasive plant removal, restoration of temporarily disturbed areas, and compensation for any permanent loss of habitat. In fact, the stated goals of the SNRAMP are not only to maintain viable populations of all special-status species, but also to maintain and enhance native plant and animal communities and enhance local biodiversity. Within the list of General Recommendations, which are management recommendations proposed throughout the various Natural Areas, the SNRAMP includes measures intended to preserve habitat for small mammal use and breeding and nesting bird habitat. The Draft EIR concludes that the long-term effects of the SNRAMP would be to restore and increase biodiversity to the Natural Areas.

Tree removal, as described on Draft EIR p. 92, would avoid the bird breeding season and would involve measures to protect nesting birds when tree removal must occur during that season. With respect to the removal of bird habitat, and as stated on SNRAMP pp. 1-5 and 1-6, trees would be selectively removed in a prescribed number of acres and/or in compliance with forestry statements

(SNRAMP Appendix F) over a 20-year period, limiting tree removal at any one time. During this time, new trees would be planted and saplings would grow to become mature trees, providing replacement bird habitat. As discussed and evaluated in Draft EIR Section VI.F.3, Greenhouse Gas Emissions, “Vegetation Sequestration of Carbon” section, pp. 455 to 457, tree removal would be conducted to promote forest health and foster native species, and would focus on removing trees that are dead, dying, diseased, insect-infested, storm-damaged, or hazardous, or whose growth is suppressed by overcrowding.

The proposed measures to protect sensitive wildlife species and birds described above would also protect habitat for common wildlife species such as mammals and insects. As described above, vegetation clearing would be limited during the spring, the breeding season for most animals. In addition, the areas of vegetation clearing would be relatively small and ample nearby undisturbed habitat would exist where common wildlife species could find refuge. As described in Issue GR-15 in the SNRAMP, more than half of the acreage of urban forests in San Francisco are categorized as MA-3 and would not undergo habitat restoration. As described in GR-10, invasive plants that are host plants for common butterfly species would also be preserved in many grassland areas.

With respect to impacts on common wildlife species, nonnative vegetation removal may affect common species, such as raccoons, squirrels, rats, and possums. However, these impacts would be short-term and temporary as all disturbed areas would be revegetated with native species, and common species can adapt to both nonnative and native habitat types. Further, because these species are acclimated to urban environments, it is expected that they would move to other areas, either within the same Natural Area or in other areas of the city. Lastly, the CEQA thresholds of significance for biological resources, which are provided on Draft EIR pp. 290 and 291, require an EIR to address impacts on sensitive species and habitats, not common species.

One commenter makes reference to loss of great blue heron nesting areas caused by vegetation clearing. Known great blue heron nesting sites are protected in the SNRAMP, as described in Issue LM-3 on SNRAMP pp. 6.1-15 and 6.1-17, and for all nesting birds in GR-4b. The potential impacts to special-status breeding birds associated with invasive vegetation removal are discussed in Impact BI-2 on Draft EIR p. 303. The SFRPD has no record of an incident in which great blue heron nesting areas were lost. Without further information that the proposed project would result in a significant impact, the Draft EIR properly concludes that impacts to breeding birds would be less than significant with mitigation.

The removal of cattails at Sharp Park would result in temporary impacts to birds through the disturbance and loss of nesting habitat from construction activities. Of the existing 19.5 acres of freshwater marsh, 14 acres would remain following restoration. Approximately 5.5 acres of freshwater marsh would be converted to open water habitat, which is optimal habitat for the federally listed wildlife species that occur at Sharp Park and is consistent with the historical wetland habitat types as described on Draft EIR p. 338. While some freshwater habitat would be permanently

converted to open water habitat as a result of proposed project activities, the majority of the freshwater marsh habitat would not be impacted, and other wetland habitats including open water and wet meadow habitat would remain undisturbed or would be increased. Draft EIR Mitigation Measure M-BI-1a, Protection of Protected Species and Riparian and Wetland Habitat, p. 298, as discussed above, would require compensation for this permanent loss of habitat through a mitigation bank, in-lieu funds, or off-site preservation subject to resource agency approval.

Some comments above question whether native plant revegetation compensates for the removal of invasive plants and whether native plants support more biological diversity than invasive species. Refer also to Response PD-11, Response BI-15, Response BI-11, RTC p. 4-388, and Response BI-31, RTC pp. 4-159, 4-402, and 4-439, for additional responses to these comments.

Comment BI-14 Mitigation measures should include 30-day notice prior to any tree removal or trail closure

The response to Comment BI-14 addresses all or part of the following individual comment:

MPIC-1-15

- In summary and conclusion, mitigation measures for any approved Natural Areas Plan tree removal and trail closure should include 30-day advance notification to the MPIC of specific cutting planned and the right of interactive review and potential adjustment of specific removals by the MPIC – the neighborhood most heavily impacted by the Plan. [MPIC-1-15]

Response BI-14

This comment requests that the Miraloma Park Improvement Club (MPIC) is given a 30-day notice prior to tree removal and trail closures.

A lead agency may only require mitigation measures under CEQA when a measure is necessary to substantially lessen or avoid significant impacts of a proposed project on the environment (refer to CEQA Guidelines Section 15041). Neither the analysis of project impacts contained in the Draft EIR nor the commenter establishes how advance direct notification of tree removal would lessen or avoid a significant impact of the project on the physical environment. To impose this requirement as a mitigation measure would, therefore, exceed the authority provided under CEQA.

SFRPD's Tree Removal Procedures require a 30-day notice for any tree removals, as discussed in Draft EIR Section III.E.5, Management Practices, p. 93. Prior to planned tree removals, SFRPD posts a notification of proposed tree removal sign on each individual tree that is planned for removal. Individuals and neighborhood organizations are not notified directly of the proposed removals. The posting includes a contact number for questions or concerns. No trees are to be removed during this 30-day period. In addition, the Urban Forestry Ordinance has a 30-day noticing requirement for the removal of street trees, significant trees, and landmark trees, which also prohibits the removal of trees during the noticing period unless the tree(s) could cause manifest danger, in which case the

tree(s) could be removed immediately, with noticing occurring after the removal. As stated on Draft EIR p. 157, no landmark trees are proposed for removal under the SNRAMP.

Comment BI-15 Effects of retaining nonnative and/or invasive species (including blue gum eucalyptus) on native habitats

The response to Comment BI-15 addresses all or part of the following individual comments:

CNPS-1-02

SFT-1-01

Gaar-1-01

Langille-1-05

Stringer-1-02

Wilson-1-02

- It is proper to evaluate the effects of tree removal, but the effects of non-removal should also be evaluated. One of those effects is the unstable conditions the trees create. The shading, wind protection, and summer fog drip drastically changes the environment, inviting in English and Algerian ivy, and Cape ivy (*Delairea odorata*). Not only are all the native plants of the area eliminated, the eucalyptus and cypress trees themselves are unable to regenerate. The consequence is what we see beginning to happen on Mt Davidson now: trees toppling because of the weight of the ivy and the cutting off of light from the tree crown, making it unable to photosynthesize. Regardless of whether the trees remain, are thinned, or removed, the impacts of non-removal need identification. [CNPS-1-02]
- The Preferred Project should fully address the long-term sustainable management and control of invasive plants due to the retention of weed-nurturing eucalyptus groves in the MA-3 areas. [SFT-1-01]
- Corona Heights. The proposed action item in the Natural Areas Management Plan to remove 16 invasive Monterey Pine trees is a positive first step in the goal to restore the native grassland of Corona Heights. More trees would need to be removed (specifically adjacent to Museum Way) if the Maximum Restoration Alternative is adopted. If the Natural Areas Management Plan or the Maximum Restoration Alternative are not adopted and implemented then the DEIR should address the specific negative environmental impacts that would occur to the biological resources of Corona Heights. The DEIR should list the plants, insects, reptiles and birds that could be lost if the native plant community is further degraded by the growth of the trees and the spread of the invasive exotic plants that the non-native trees promote. [Gaar-1-01]
- The Plan is NOT radical. In fact, the Proposed Project neglects to fully address the long-term sustainable management and control of invasive plants, due to the retention of weed-nurturing eucalyptus groves in the MA-3 areas, which designation perpetuates a fragmented approach to natural resources management. [Langille-1-05, Wilson-1-02]
- I am an ecologist working in similar environments and am concerned that the removal of eucalyptus groves in the MA-3 areas was not fully evaluated. The threat these trees pose in the long term to the goal of preserving biodiversity is significant and the Proposed plan is in my opinion- inadequate at addressing them. [Stringer-1-02]

Response BI-15

These comments request that the Draft EIR evaluate the effects of not removing invasive exotic plants and nonnative trees, thereby addressing the relative environmental benefits of invasive plant removal. These comments also express concern about the impacts of not removing eucalyptus trees in MA-3 areas under the proposed project.

SNRAMP Management Areas and Removal of Invasive Species

Nonnative plants and animals are commonly found throughout many of the Natural Areas, and accordingly the SNRAMP classifies the land within the Natural Areas into three management area categories (MA-1, MA-2, MA-3) based on the level of habitat complexity and sensitivity, and the presence of significant plant and animal species. The SNRAMP focuses restoration efforts on those areas that have the most sensitive and diverse habitats (MA-1) and focuses on recreation and preservation of greenspace in the least sensitive areas (MA-3).

Invasive plants are not proposed to be removed in MA-3 areas under the proposed project, and are not being removed in these areas now; the project would have no effects related to invasive plant removal in MA-3 areas compared to the existing conditions.

Effects of Nonnative and/or Invasive Species (Including Blue Gum Eucalyptus) on Native Habitats

As articulated on Draft EIR pp. 84 to 87 and also stated in Response PD-11, RTC p. 4-159, the SNRAMP sets forth several goals related to conservation and restoration. Among those goals are to maintain and enhance native plant and animal communities and local biodiversity; to decrease the extent of invasive exotic species cover; and to re-establish native community diversity, structure, and ecosystem function where degraded (SNRAMP p. 2-1). Response BI-21, RTC p. 4-410, goes on to say that nonnative species have a detrimental effect on native habitats by outcompeting the native species, thus creating a monoculture, which reduces biodiversity (refer to IUCN Guidelines for the Prevention of Biodiversity Loss Caused By Alien Invasive Species).

According to Columbia University's Introduced Species Summary Project:

"The loss of biodiversity and habitat is a great threat from the Tasmanian Blue Gum tree, as it is from any eucalyptus. It creates virtual monocultures and can rapidly take over surrounding compatible areas, completely changing the ecosystem. That monoculture creates a loss of habitats for many species that relied on the previous system. Due to its great capacity for taking over a wide variety of habitats, the Blue Gum eucalyptus could possibly spread to a great range of systems where there is enough water content and create huge monocultures."¹¹⁴

¹¹⁴ http://www.columbia.edu/itc/cerc/danoff-burg/invasion_bio/inv_spp_summ/Eucalyptus_globulus.html, accessed on April 20, 2016.

Further, it has few natural predators, possesses rapid growth rates, and shades and poisons nearby sun-loving natives by exuding natural herbicides.¹¹⁵ As an example, coastal scrub requires light to reach the forest floor in order to persist; therefore, species that shade this sensitive habitat, such as invasive blue gum eucalyptus trees, would be removed in select areas. As another example, when the understory of the forest is densely populated with invasive species, it becomes almost impossible for young oak trees to successfully germinate, become established, and reach maturity.

On April 13, 2015, following the June 11, 2012, close of the public comment period for the SNRAMP Draft EIR, the San Francisco Forest Alliance submitted another letter regarding the updated status of blue gum eucalyptus according to the California Invasive Plant Council (CAL-IPC).¹¹⁶ While the CAL-IPC has changed their “invasiveness” status in overall score from “Moderate” to “Limited,” CAL-IPC also states that this change is due to a large degree to evaluating eucalyptus across the entire state, rather than focusing on coastal areas where it is most prone to spreading (such as in San Francisco).¹¹⁷ CAL-IPC goes on to state (in its Assessment of Tasmanian Blue Gum, a link to which is provided in the previous footnote) that, “Some stands were planted so densely that few other plants grow within the stand, while less dense stands often contain more plant diversity. Some stands are regenerating and expanding in size, while others in less favorable conditions are not. Some stands are within areas now being managed primarily for ecological values, others are not. Where stands do occur in areas being managed for ecological values, it makes clear sense to assess their ecological impact as an invasive plant.” The same Assessment further states that eucalyptus “stands displace native plant communities. Plant communities can be severely altered in circumstances where blue gum was planted at high density and growing conditions are favorable. Plant communities in other places can be significantly less impacted.” And, further, eucalyptus “stands can form near monocultures in areas where they were planted at high densities (Griffiths & Villablanca 2013). On Angel Island in San Francisco Bay, native trees were only found in eucalyptus plantings where the blue gums had been widely spaced, and these natives were “not vigorous (McBride, Sugihara, and Amme 1988).” Similarly, the Assessment also indicates that “Though not all *E. globulus* stands are expanding, those in moist coastal habitats often expand at a significant rate.” In summary, while their invasiveness status has been changed, CAL-IPC encourages land managers to look at blue gum forests on a case-by-case basis and there is still considerable evidence to support the management of eucalyptus as an invasive species in most of the Natural Areas in San Francisco.

¹¹⁵ <http://sfrecpark.org/parks-open-spaces/natural-areas-program/natural-areas-faqs/>, accessed on November 11, 2015.

¹¹⁶ http://www.cal-ipc.org/ip/inventory/pdf/Eucalyptus_globulus_PAF_2015March.pdf, accessed November 11, 2015.

¹¹⁷ http://www.cal-ipc.org/ip/inventory/pdf/Eucalyptus_globulus_PAF_2015March.pdf, accessed on November 11, 2015.

Benefits of Forest Thinning

As also stated in Response AE-1, RTC p. 4-219 forest thinning, which would occur as a result of the removal of eucalyptus trees, results in an increase in the average diameter of the residual trees, promotes tree growth, and improves forest health through the removal of suppressed trees. More importantly, thinning allows promotion and establishment of a native understory and diversity and decreases the site dominance of invasive tree species, improving the overall health of the forest by relieving overcrowding and promoting habitat for a large array of wildlife.¹¹⁸ The benefits of forest thinning are reiterated by Utah State University, Forest Extension Program, which states that “Thinning your forest and grazing the understory can result in increased tree quality and size, due to decreased competition for light, water, and nutrients” and providing “important shelter and forage for wildlife.”¹¹⁹ The United States Department of Agriculture also supports forest thinning, stating that “Many late-successional forests in the Pacific Northwest are characterized by the high levels of biodiversity they support, variable tree spacing, and multiple layers in the overhead canopy. They are a stark contrast to young, dense stands or stands managed primarily for timber where there is little variation in tree spacing and species composition. Because little light reaches the forest floor in these types of forest stands, the understory is often sparse to nonexistent.”¹²⁰

Effects of Retaining Invasive Species (No Project Alternative)

The effects of retaining (or not removing) invasive species are also addressed in the Draft EIR in the analysis of the No Project Alternative, specifically Draft EIR pp. 470 and 471, stating that:

“As discussed above, the No Project Alternative does not include large-scale programmatic habitat restoration or invasive species removal; therefore, habitat restoration under the No Project Alternative would be less effective. Encroachment of invasive species and conversion of native habitat to nonnative habitat would be more likely under the No Project Alternative and could threaten the continued existence of sensitive plant species, especially those of limited distribution in the Natural Areas. This potentially significant impact of the No Project Alternative could be mitigated only by implementing the restoration activities identified in the SNRAMP; therefore, the long-term impacts on special status plant species would be potentially significant.”

With respect to the evaluation of alternatives, in accordance with CEQA Guidelines Section 15126.6, an EIR’s analysis of project alternatives shall focus on alternatives to the project that would avoid or substantially lessen any of the significant impacts identified in the EIR, and an EIR need not evaluate every conceivable alternative to the proposed project; rather, the EIR alternatives analysis must describe a reasonable range of alternatives that would feasibly obtain most of the basic project

¹¹⁸ <http://sfrecpark.org/parks-open-spaces/natural-areas-program/natural-areas-faqs/>, accessed on August 6, 2014.

¹¹⁹ <http://extension.usu.edu/htm/publications/file=14601>, accessed on April 20, 2016.

¹²⁰ www.fs.fed.us/pnw/science/scifi112.pdf, accessed on April 20, 2016.

objectives and would avoid or substantially lessen the significant environmental impacts of the project.

Nevertheless, the effect of removing less nonnative vegetation than what is proposed by the SNRAMP is best characterized by the No Project Alternative. As described on Draft EIR p. 465, the No Project Alternative assumed that SFRPD would continue management activities authorized under the 1995 Management Plan, but that none of the programmatic projects would occur. Therefore, habitat restoration and invasive tree and vegetation removal would be smaller in scale under the No Project Alternative as compared to the proposed project. The effects of the No Project Alternative on biological resources are discussed on Draft EIR pp. 470 to 475. Draft EIR p. 471 concludes, with respect to special-status plant species, that "... habitat restoration under the No Project Alternative would be less effective. Encroachment of invasive species and conversion of native habitat to nonnative habitat would be more likely to occur under the No Project Alternative and could threaten the continued existence of sensitive plant species, especially those of limited distribution in the Natural Areas. This potentially significant impact of the No Project Alternative could be mitigated only by implementing the restoration activities identified in the SNRAMP; therefore, the long-term impacts on special-status plant species would be potentially significant." Similar conclusions are drawn for potential impacts of the No Project Alternative on special-status wildlife species, especially those present at the Sharp Park Natural Area. Therefore, the effects of less removal of invasive vegetation and exotic invasive plants, to the degree applicable under CEQA, are evaluated in the Draft EIR under the No Project Alternative.

Comments regarding the Maximum Restoration Alternatives are addressed in Response AL-, RTC p. 4-562.

Comment BI-16	California Red Legged Frogs in Laguna Salada
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The response to Comment BI-16 addresses all or part of the following individual comment:

Bowman-2-09

- Side Note: The Lagoon is not a critical habitat for any species. It is not any more critical to the frogs than the water bodies in Golden Gate Park that may also support the California Red Legged Frog. The 22,000 acre San Francisco Peninsula Watershed is the critical habitat for the frogs, which are actually common along the coast but have declined in the Sierras. Because it was a salt water lagoon, it is also questionable as to whether the frogs were introduced or naturally exist in the lagoon. There is also no substantive evidence that recreation is harming the frogs in the lagoon. [Bowman-2-09]

Response BI-16

This comment states that Laguna Salada is not designated as critical habitat and that there is no substantive evidence that recreation is harming frogs in the lagoon.

The commenter is correct in that Laguna Salada is not designated as critical habitat by the USFWS; however, CEQA requires analysis of potential impacts to special-status species and their habitat regardless of critical habitat designations or whether they are naturally occurring at a site. The Sharp Park property is known habitat for the California red-legged frog and the San Francisco garter snake; therefore, impacts to this species associated with the Sharp Park restoration project are discussed in Impact BI-6 on Draft EIR p. 320. The USFWS issued a Biological Opinion in association with the Pumphouse Project at Sharp Park that assesses the impacts of recreation activities on California red-legged frog and San Francisco garter snake, and outlines the specific conservation measures that must be employed in order to avoid a significant impact to either the California red-legged frog or the San Francisco garter snake.

On the Biological Opinion p. 23, the USFWS states that habitat loss, nonnative species introduction, and urban encroachment are the primary factors that have adversely affected the California red-legged frog throughout its habitat. Humans can also facilitate the spread of disease by encouraging the further introduction of nonnative carriers and by acting as carriers themselves. Human activities, such as recreation, can also introduce stress by other means, such as habitat fragmentation, that results in the listed species being more susceptible to the effects of disease.

Specifically, with respect to Laguna Salada, Biological Opinion p. 29 states that California red-legged frog and San Francisco garter snake are affected by ongoing operation and maintenance of Sharp Park Golf Course. Activities at Sharp Park Golf Course that affect these species include pumping of water from Horse Stable Pond to the Pacific Ocean to control winter flood waters. Pumping may cause frog egg masses to become stranded and desiccated; cause entrainment of egg masses and juvenile frogs. Over time, this could reduce habitat quality in Horse Stable Pond and Laguna Salada by encouraging encroachment of cattails and tules, thus altering the salinity levels in both waterbodies. For the reasons listed above, recreational uses can affect the California red-legged frog. However, golf course and Natural Areas management activities consider and address potential negative effects on the California red-legged frog.

Comment BI-17	Disagree with Draft EIR identification of feral geese
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The response to Comment BI-17 addresses all or part of the following individual comment:

Bose-1-07

- Pg 466: Feral geese. The geese in San Francisco, including the ubiquitous Canada Geese, are not feral (meaning domesticated animals living in the wild). They are authentic wild geese and as such are protected species. [Bose-1-07]

Response BI-17

This comment states that geese in San Francisco are not feral.

The reference of feral geese in the Draft EIR is taken from the description in the 1995 Management Plan's general policies and management actions contained in the discussion of the "No Project Alternative" and reflects the terminology within the 1995 Management Plan. The commenter is correct that the 1995 Management Plan's characterization of Canada geese as a "feral" species is inaccurate. However, this error derives from the 1995 Management Plan and not the Draft EIR. Therefore, the text on Draft EIR p. 466 (eleventh bullet) has been changed as follows:

- Cooperate with other agencies to address issues of such species as feral cats, domestic dogs, and ~~feral geese~~¹²¹

Canada geese present within San Francisco receive the same protection as all migratory birds under the Migratory Bird Treaty Act. In compliance with that act, the SFRPD would be required to avoid harming or removing the nests of all migratory bird species. The implementation of Recommendation GR-4b in the SNRAMP would ensure that direct impacts to nesting birds would be avoided and minimized. Refer also to Response BI-13, RTC p. 4-397, for a further discussion of measures to avoid or reduce impacts to nesting birds.

<p>Comment BI-18 Scrub habitat should be clearly defined</p>

The response to Comment BI-18 addresses all or part of the following individual comment:

CNPS-1-04

- There is mention of scrub, without identifying it as a habitat. We have many different types of ecosystems or habitats: wetlands, grasslands, shrublands, oak woodlands, &c. Scrub as a habitat type should be identified as a scientific community--e.g., North Coastal Scrub. French broom and Himalayan blackberry do not fit in that category. [CNPS-1-04]

Response BI-18

The comment states that scrub should be mentioned in the Draft EIR as a scientific community.

In Draft EIR Section V.G.2, Environmental Setting, all of the habitat types within the Natural Areas are presented. This includes northern Francisco coastal scrub, central dune scrub, central coast riparian scrub, and nonnative scrub, which all correspond to the Sawyer et al. classification system. Coastal scrub habitat is identified in Table 10 as a sensitive habitat type. The use of the general term "scrub" in the Draft EIR is intended to encompass one or more of these more specific habitat types.

¹²¹ Geese in San Francisco are not feral; however, they were incorrectly identified as feral in the 1995 SNRAMP.

Comment BI-19 Impacts and associated mitigation for wetlands and other coastal resources

The response to Comment BI-19 addresses all or part of the following individual comments:

CCC-1-02

CCC-1-04

- Proposed project activities, from the perspective of the Coastal Act, should not result in the filling of wetlands, as defined under Section 30121 of the Coastal Act, or mowing of wetland vegetation. Additionally, there should not be significant modifications of wetland hydrology. The City will be required to ensure that all wetlands are correctly delineated according to Coastal Act Section 30121 and Section 13577 of the Administrative Regulations. Potential impacts to wetlands and other significant coastal resources must be clearly identified along with appropriate measures to mitigate those impacts. [CCC-1-02]
- Lake Merced is located within the Coastal Zone. The DEIR correctly identifies the City of San Francisco as the agency responsible for issuing a CDP for any projects located within 100 feet of the lake. It should be additionally noted that the City's final action on a CDP is appealable to the Coastal Commission. Additionally, the open waters of the lake are under the retained jurisdiction of the Coastal Commission. Any proposal that involves that area requires a CDP from the Commission. [CCC-1-04]

Response BI-19

These comments state that the Proposed Project should not result in the filling of wetlands or a significant modification of wetland hydrology. The comments also state that while the City is responsible for issuing a coastal development permit for any project within 100 feet of Lake Merced, the decision is appealable to the CCC, and, further, the open waters of the Lake are under the retained jurisdiction of the CCC.

Impacts of the proposed project on wetlands and other sensitive habitats are addressed in Draft EIR Section V.G, Biological Resources (in particular, refer to Impact BI-6, beginning on Draft EIR p. 319, regarding impacts of the Sharp Park restoration on wetlands and special-status species habitat located in the Coastal Zone and Response BI-25, RTC p. 4-424).

Draft EIR Mitigation Measure M-BI-1a, Protection of Protected Species and Riparian and Wetland Habitat, p. 298, includes measures to avoid, minimize, restore, and compensate for impacts on habitat supporting sensitive species, riparian habitat, and wetlands. It is noted in Draft EIR Section V.G.1, Regulatory Setting, p. 271, that the proposed Sharp Park restoration activities would require a coastal development permit from the CCC. Additionally, it is noted that for projects within the coastal zone, even those that are not yet fully defined by the SFRPD (including actions within the coastal zone at Lake Merced), coastal development permits would be sought as project details are known.

Comment BI-20 Draft EIR does not address impacts to common wildlife

The response to Comment BI-20 addresses all or part of the following individual comments:

WTPCC-1-08

Hess-1-03

Johns-1-04

Kessler-1-10

Kessler-2-10

- WTPCC opposes the destruction of existing habitat needed by the wildlife and birds currently living in the parks. For example, NAP has removed underbrush in Glen Canyon that is used by coyotes to hide from people and dogs, and replaced it with grasslands. Unlike the underbrush, the grasslands provide little “cover” for the coyotes or other wildlife living in the natural area. [WTPCC-1-08]
- (3) Some of the animals and birds I have spotted that would lose this important habitat include hawks, owls, coyotes, hummingbirds, skunks, rabbits, opossum, red-winged blackbirds, ravens and crows. What a terrible thing it would be to destroy their home. [Hess-1-03]
- 2. And has anyone studied the habitat issues? What happens to our hawks, turkey buzzards, and other birds that rely on that forest for life? And what happens to the coyotes, skunks, racoons, and other animals that rely on that forest for life? [Johns-1-04]
- And what about birds, raptors and furry animal life that are not on the endangered lists – wildlife which already lives in these areas now? There is no mention of these in the EIR. [Kessler-1-10] [Kessler-2-10]

Response BI-20

These comments express that the Draft EIR should address impacts to common wildlife, including coyotes in Glen Canyon.

The stated goals of the SNRAMP are not only to maintain viable populations of all special-status species, but also to maintain and enhance native plant and animal communities and enhance local biodiversity. Within the list of General Recommendations, which are management recommendations proposed throughout the various Natural Areas, the SNRAMP includes measures intended to preserve habitat for small mammal use and breeding and nesting bird habitat. The EIR recognizes that the Natural Areas are important habitat for wildlife species, including migrating and resident birds and coyotes. The EIR’s primary responsibility is to identify sensitive wildlife that could be impacted by the project, evaluate the significance of the impact, and identify mitigation to reduce or eliminate impacts determined to be significant. CEQA Guidelines Section 15065 directs lead agencies to consider other species when the effects might cause a fish or wildlife population to drop below self-sustaining levels, but this was not considered a possible outcome of the SNRAMP because the underlying purpose of the Project, as articulated in two of the CEQA objectives, is to identify issues and impacts adversely affecting ecosystem functions and biological diversity and identify, prioritize, and implement restoration and management actions designed to promote the

functioning of San Francisco's native ecosystem, including the maintenance and enhancement of native biodiversity.

Draft EIR pp. 290 and 291 discuss the criteria used in the Draft EIR to identify potentially significant impacts on biological resources. Potential effects of the SNRAMP on birds and other wildlife species under these criteria are discussed on Draft EIR pp. 294 to 344. The Draft EIR concludes that implementation of programmatic projects and routine maintenance activities under the SNRAMP would not result in significant adverse impacts on biological resources.

As stated in Recommendation GR-1c, restoration activities shall be conducted during the appropriate time of year and, at any one time, the area of vegetation removal shall be relatively small. With respect to common species, these species/habitats are abundant throughout the San Francisco Bay region. Further, common species are adapted to urban environments with high degrees of disturbance and would be expected to use nearby areas for shelter, foraging and breeding while restoration areas are temporarily impacted. Refer also to Response PD-18, RTC p. 4-188, for a discussion of coyotes at Glen Park.

Comment BI-21 Biodiversity would decrease with removal of plants and planting of native coastal dune plants

The response to Comment BI-21 addresses all or part of the following individual comments:

Art-1-04

Cook-1-05

Delacroix-1-04

Fox-1-04

Jungreis-1-05

Ray-1-04

- Removing the plants that generations of gardeners have planted and tended to return these areas to sand, planted only with "native" coastal dune plants would decrease wildlife biodiversity. NOT increase wildlife biodiversity. We should not remove any existing vegetation (never mind 1100 acres, 1/3 of our parklands) to return these acres back into sand, with only coastal scrub plants. [Art-1-04] [Delacroix-1-04] [Fox-1-04] [Ray-1-04]
- Removing the plants that generations of gardeners have planted and tended to return these areas to sand, planted only with "native" coastal dune plants would decrease wildlife biodiversity. NOT increase wildlife biodiversity. [Cook-1-05] [Jungreis-1-05]

Response BI-21

These comments indicate that the reintroduction of native plants would decrease biodiversity.

As stated in the Draft EIR, the removal of invasive species, such as iceplant, eucalyptus, Ehrharta grass, and radish would occur within the native coastal dune habitat, which is identified as a sensitive habitat. In most cases, these were not plants that were intentionally planted, but have spread on their own due to their invasive nature. Coastal scrub requires light in order to persist; therefore, species that shade this sensitive habitat, such as invasive blue gum eucalyptus trees, would be removed in select areas.

Response G-12, RTC p. 4-60, provides the definition of invasive species that is contained in Executive Order 13112, which is a species that is nonnative (or alien) to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.¹²² A majority of nonnative species cause no harm (meaning they are not invasive), and some are even beneficial. Following the removal of invasive species, native species would be replanted in order to enhance the natural habitat, as well as stabilize the coastal dunes. Invasive species have a detrimental effect on native habitats by outcompeting the native species, thus creating a monoculture, which reduces biodiversity (refer to IUCN Guidelines for the Prevention of Biodiversity Loss Caused by Alien Invasive Species). As articulated on Draft EIR pp. 84 to 87, some of the expressed goals and objectives of the SNRAMP are to maintain and enhance native plant and animal communities; reestablish native community diversity, structure, and ecosystem function where degraded; and promote the functioning of San Francisco's native ecosystem, including the maintenance of native biodiversity.

<p>Comment BI-22 Distinction regarding native and nonnative predators</p>

The response to Comment BI-22 addresses all or part of the following individual comment:

CNPS-1-03

- Feral cats are identified as predators, which they are. But the connotation in the DEIR implies that predators are bad. They are not; native predators are a part of the system that nature has employed for millions of years to bring balance and stability. Nonnative feral cats should be identified as deleterious and destabilizing to natural ecosystems and biodiversity. [CNPS-1-03]

Response BI-22

This comment indicates that the Draft EIR should describe nonnative feral cats as deleterious and destabilizing to natural ecosystems and biodiversity.

The Planning Department concurs with this distinction.

The text on Draft EIR p. 320 (second bullet) has been changed to further address predators in the Draft EIR, as follows:

- Converting about half an acre of wet meadow/freshwater marsh wetland to an upland refuge in the middle of the lagoon to provide snakes and frogs with refugia from feral cats and other nonnative predators; creating about an acre of replacement wet meadow wetland along the northern and western edges of the lagoon in place of coastal scrub habitat, achieving no net loss of wetland habitat; and

¹²² <http://www.invasivespeciesinfo.gov/docs/council/isacdef.pdf>, accessed on September 14, 2015.

As well, the text on Draft EIR p. 327 (third bullet) has been changed, as follows:

- During project activities, all trash that could attract nonnative predators would be properly contained, removed from the work site, and disposed of regularly. Following project completion, all trash and construction debris would be removed from work areas.

Comment BI-23 Feral cat and predator control

The response to Comment BI-23 addresses all or part of the following individual comments:

GGAS-1-02	Bartley-1-06	Bartley-1-09
Gravanis-1-05	Gravanis-1-06	

- Overall, the Project Description adequately describes the SNRAMP program and the purpose of the DEIR. We appreciate that the DEIR provides a list of special management concerns that exist in San Francisco, especially in its Natural Areas. These include
 - > Loss of special status or unusual native species or habitats;
 - > Loss of diversity and components of a healthy ecosystem;
 - > Effect of nonnative invasive species on the local native flora and fauna;
 - > Erosion of Natural Areas from inappropriately located or constructed trails and access roads;
 - > Effect of human uses (recreation, poor trail location or too many trails, and a general increase in use) that conflict with conservation values; and
 - > Effects of feral animals and domestic pets on native flora and fauna.

We will address these specific concerns in the Recommendations and Environmental Impacts sections below, but we note that while the DEIR calls out these issues, it does not prescribe adequate management measures to deal with each. Of particular concern is the Planning Department's decision to allow feral cat feeding stations to continue to be operated in San Francisco's Natural Areas. In fact, the DEIR's failure to study the impacts of feral cat feeding stations in the Natural Area may be a fatal flaw that renders it vulnerable to challenge.

Feral cat colonies and feeding stations should not be tolerated in any portion of the Natural Areas. The destructive impact on birds and other wildlife has been well documented. Feral cat feeding stations also feed non-native rats and other species which eat native bird eggs and chicks (raccoons, common raven and western scrub jays). There is an estimated population of 60 million feral cats in the US and their negative financial impact in the US cost \$17 billion.

Unfortunately, the DEIR states the intent to "[i]mplement the feral cat control policy from the Quail Recovery Plan approved by the San Francisco Commission on the Environment." (DEIR, at 110)

Section 2.4.3 of the Quail Recovery Plan states:

Board of Supervisors Resolution No. 631-00 specifically requires a quail recovery effort that will be implemented “without killing other animals.” Removal or relocation of predators may result in death and other unintended negative consequences. Therefore, any proposed removal or relocation of predators of any kind must be submitted in writing to the San Francisco Recreation and Park Department for review and recommendation. In each proposed case, the Department will consult with San Francisco SPCA to determine whether the relocation or removal is feasible and, if so, how best it can be done. If the relocation or removal is approved by SFRPD, the Department will utilize the pro bono services of SF/SPCA to accomplish the task unless SF/SPCA declines to participate.

(Quail Recovery Plan, at 3). The Board of Supervisors Resolution No. 631-00 was intended to specifically apply to the Quail Recovery Plan, not to the SNRAMP. It is an extremely unwise management decision to import the strictures of Resolution No. 631-00 into a management for natural areas.

First, Resolution No. 631-00 was intended to apply only to the Save the Quail campaign and was not subject to debate or public input as part of a larger management scheme for all of San Francisco. Second, the Resolution was not considered with the special needs and sensitivities of the Natural Areas Program or its prioritization of the protection of biodiversity. Third, the Resolution was ill-founded in the first instance and constitutes a significant and unnecessary conflict with the goal of protecting native wildlife in the City.

In any event, the DEIR as written prohibits the use of lethal control for “any animal”, including feral cats. It also effectively delegates decision-making authority about the potential removal or other control of feral cats to the SPCA, which is not a government entity and which has unfortunately consistently demonstrated that it prioritizes non-native feral cats over the wellbeing of native birds, lizards, mammals and insects that suffer significant impacts from feral cat colonies and feral cat feeding stations. While the SPCA has repeatedly verbally expressed concern about native animals, it has never once made efforts to reduce their impacts on native wildlife. Rather, it has consistently fought every reasonable effort to do so. With this language, the Planning Department is putting a non-wildlife organization at the forefront of decisions that have significant impacts on native wildlife and native ecosystems in the Natural Areas Program.

Perhaps more importantly to the viability of the DEIR, Golden Gate Audubon argues that if the Planning Department intends to implement a prohibition against lethal control in the NAP, the environmental impacts of that policy must be fully reviewed in the DEIR. The current DEIR provides no data or other information about this policy. If the Planning Department fails to conduct the necessary environmental review, Golden Gate Audubon will consider the DEIR to be fatally flawed and will consider an appeal and all necessary legal challenges.

It would be far wiser for the NAP to develop feral cat control as part of its Integrated Pest Management (IPM) program. (See, Hildreth, A. et al. 2010. Feral Cats and Their

Management. University of Nebraska, Lincoln Extension, at 4) As part of a planned IPM program, the effort could involve a series of prophylactic measures to prevent feral cat populations from expanding to the point that lethal control would be necessary. (Id.) A well-planned, comprehensive program would also reduce the need for extremely expensive and controversial Trap-Neuter-Release (“TNR”) efforts, which are of questionable value in reducing colony sizes.

The Planning Department’s effort to sweep this issue under the rug is one of the most glaring flaws in the DEIR. As expressed above, unless this issue is given much greater consideration and the environmental impacts of the policy are fully studied and mitigated – Golden Gate Audubon will be in the unhappy and unwanted position of consider a challenge to the adequacy of the DEIR.

Golden Gate Audubon is most concerned with this section’s failure to discuss the environmental impacts of implementing General Recommendation 7, especially GR 7a, as formal policy in implanting the SNRAMP. The DEIR does not discuss the environmental impacts arising from GR 7 and does not consider any alternatives to perpetuating feral cat colonies in Natural Areas. The DEIR should be revised to consider different alternatives, including the absolute exclusion of feral and free-ranging cats in Natural Areas and to consider the impacts of all reasonable alternatives for cat population management.

The DEIR would be improved by acknowledging that the total San Francisco population of California Quail is approximately 12 birds. The quail have been extirpated from much of the city due to management, including tolerance of feral cat colonies and off-leash dog activities. The quail should be considered a locally significant bird and provided special status protection consideration in the DEIR.

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- Thank you for including feral cat considerations in several parts of the SNRAMP. Feral cats and their feeding stations should not be permitted in any of the natural areas parks and open spaces. It is a biological fact that the allowance of feral cats has been a primary cause for steep declines in avian diversity in San Francisco including the near extirpation of the California Quail. [Bartley-1-06]
- Trash containers at all parks need to be wildlife resistant. Population levels of meso-level predators such as Common Raven have grown exponentially in the last twenty years in part due to access to human food waste. These animals in turn have a negative impact on other native species such as raptors who are primary natural pest control agents. Also Norway rat populations have increased due to access to garbage and until rodenticides are outlawed for

use by citizens use of them on rats will continue which has a double whammy effect on Owls and Raptors when they catch a poisoned rat that in turn kills them (in an excruciating manner). Increased education and enforcement of wildlife feeding laws will also help in this regard. [Bartley-1-09]

- Predators – Putting the feral cat problem under the heading “Predators” seems like an odd choice. While feral cats are indeed predators, that’s not what makes them a problem. Natural predator-prey relationships are a good thing, part of the systems and processes that we are trying to protect and restore; the problem with feral cats is that they are predators that are not indigenous to our local ecosystems.

GR-7c – Undertake control of non-cat predators only where they are concentrated in such a manner that they are having a substantial effect on native wildlife populations. Why is there no differentiation between native and non-native predators? While native predators do sometimes need to be controlled, largely due to disproportionate population growth caused by human activity, the approaches to control should be different.

GR-7b – Develop outreach materials to educate neighbors and users of Natural Areas about feral cats; Also needed are measures to educate the public about not feeding, intentionally or otherwise, any animals, predator or not, native or not. [Gravanis-1-05]

- “P.41 During project activities, all trash that could attract predators would be properly contained, removed from the work site, and disposed of regularly. Following project completion, all trash and construction debris would be removed from work areas.” All trash that could attract any species, predator or not, should be contained and removed immediately. [Gravanis-1-06]

Response BI-23

These comments express both support for the proposed management actions for control of feral cats and a preference for more aggressive feral cat control measures than those proposed under the SNRAMP, further stating that the Draft EIR is inadequate because it does not identify the environmental impacts of not implementing more aggressive feral cat controls. They also indicate that native and nonnative (e.g., feral cats) predators should be controlled differently. Lastly, these comments also request that trash containers be wildlife resistant and that trash is removed immediately to control predation from other animals.

The purpose of the Draft EIR is to identify potentially significant adverse environmental consequences of the proposed project. Because predation on birds and other native wildlife by feral cats is an existing condition, the proposed feral cat management measures would have a beneficial effect on the environment relative to the environmental baseline. Although a more aggressive feral cat control program could have greater environmental benefits than the project as proposed, CEQA does not require project modifications (i.e. mitigation measures or project alternatives) in response to environmentally beneficial effects of a proposed project.

Details on feral animal issues and the associated management approaches can be found in the SNRAMP document, specifically Recommendations GR-7a, GR-7b, and GR-7c. These recommendations are also summarized on Draft EIR p.110. Recommendation GR-7a includes gradually moving feeding stations away from wildlife habitat areas at Lake Merced and Golden Gate Park Oak Woodlands to protect wildlife and relocating feral cats and feral cat colonies. More specifically, Recommendation GR-7 states that the SFRPD shall implement the policy toward feral cat control as adopted from the Quail Recovery Plan and approved by the Commission on the Environment on January 14, 2004. The Quail Recovery Plan reads, “[r]emoval and relocation of predators may result in the death and other unintended negative consequences. Therefore, any proposed removal or relocation of predators of any kind must be submitted in writing to the SFRPD for review and recommendation. In each proposed case, the Department will consult with the San Francisco SPCA to determine whether the relocation or removal is feasible and, if so, how best it can be done. If the relocation or removal is approved by SFRPD, the Department will utilize the pro bono services of SF/SPCA to accomplish the task unless SF/SPCA declines to participate.” Recommendation GR-7b includes an outreach effort to educate neighbors and users of the Natural Areas about feral cats, including adoption and spaying/neutering, and Recommendation GR-7c suggests predator control, but only in situations where the predators are concentrated in such a manner that they are having a substantial effect on native wildlife populations. For purposes of SNRAMP, “feral cat control” refers to managing feral cats such that the location of feral cats and cat colonies minimizes the risk of cat predation on wildlife. It does not refer to “trap and kill.” Additionally, the establishment of new feral cat colonies would be discouraged in Natural Areas where colonies could threaten wildlife. While the presence of feral cats as well as other predators (such as ravens or rats) is an existing condition, implementation of the SNRAMP, including the recommendations previously discussed, would represent an improvement over existing conditions. Comments about the establishment of feral cat colonies will be considered by the decision makers as part of their decision to approve, modify, or disapprove the proposed project.

With respect to general predator control, and as previously stated, General Recommendation GR-7c states that the SFRPD can undertake control of non-cat predators where they are concentrated in such a manner that they are having a substantial effect on native wildlife populations, allowing SFRPD staff the flexibility to use control measures that are specific to the predator of concern in a given situation. General Recommendation GR-7b, which recommends that SFRPD develops outreach materials to educate neighbors and users of Natural Areas about feral cats, was developed to specifically address the feral cat population, which the SFRPD considers the greatest predatory threat to native wildlife, and it could be applied to other predators, as well.

It would not be practical to contain and remove all trash immediately in terms of the manpower needed to conduct such an effort on a daily basis in the 31 Natural Areas. To discourage users from leaving trash in Natural Areas and other SFRPD parks, the SFRPD encourages park users to “Leave No Trace” and remove all trash with them when leaving the park. The SFRPD may consider the use

of wildlife-resistant trash containers, but because this would not affect the EIR's environmental impact analysis, no changes to the document text have been made; however, the above comments have been forwarded to the SFRPD staff and Commission for their consideration.

Refer also to Response BI-22, RTC p. 4-411, for a discussion of native and nonnative predator control.

Comment BI-24	Distinction between native and nonnative species and invasive species
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The response to Comment BI-24 addresses all or part of the following individual comments:

MPIC-2-13	SFFA-3-02	WTPCC-1-15
Art-1-05	Bose-1-08	Cook-1-04
Delacroix-1-05	Fox-1-05	Hess-1-02
Jungreis-1-04	Kessler-1-02	Kessler-2-02
Ray-1-05	PH-Antonini-02	PH-Antonini-04

- The DEIR also justifies the destruction of thousands of trees on the grounds that they are non-native and “invasive”:

Further, most of the trees within the Natural Areas are nonnative and most are also invasive. The invasive forests within the Natural Areas are predominantly eucalyptus, although cypress, pine, and acacia also occur. (DEIR, page 456)

In fact, there is no evidence that any of these trees are “invasive.” Although the California Invasive Plant Council has classified eucalyptus as “moderately invasive,” there is no scientific evidence to support this claim. According to the US Forest Database of Plants and Trees, “It [blue gum eucalyptus] does not spread far and rarely invades wildlands.” (<http://www.fs.fed.us/database/feis/plants/tree/eucglo/all.html>)

In “Vegetation Change and Fire Hazard in the San Francisco Bay Area Open Spaces,” William Russell (US Geological Survey) and Joe McBride (UC Berkeley) used aerial photos of Bay Area parks taken over a 60-year period from 1939 to 1997 to study changes in vegetation types. They studied photos of 3 parks in the East Bay (Chabot, Tilden, Redwood), 2 parks in the North Bay (Point Reyes, Bolinas Ridge), and one on the Peninsula (Skyline). These photos revealed that grasslands are acceding to shrubland, dominated by native coyote brush and manzanita. Eucalyptus and Monterey pine forests actually decreased during the period of study. In those cases in which forests increased in size, they were native forests of oaks or Douglas fir. In other words, **these researchers found no evidence that non-native trees are invading native trees or shrubs.** [MPIC-2-13]

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Further, most of the trees within the Natural Areas are nonnative and most are also invasive. The invasive forests within the Natural Areas are predominantly eucalyptus, although cypress, pine, and acacia also occur. (DEIR, page 456)

In fact, there is no evidence that any of these trees are “invasive.” Although, the California Invasive Plant Council has classified eucalyptus as “moderately invasive,” there is no scientific evidence to support this claim. According to the US Forest database of plants and trees, “It [Blue gum eucalyptus] does not spread far and rarely invades wildlands.”³

William Russell (USGS) and Joe McBride (UC Berkeley) (Russell and McBride 2003) used aerial photos of Bay Area parks taken over a 60 year period from 1939 to 1997, to study changes in vegetation types. They studied photos of 3 parks in the East Bay (Chabot, Tilden, Redwood), 2 parks in the North Bay (Pt Reyes, Bolinas Ridge), and one on the Peninsula (Skyline).

These photos revealed that grasslands are succeeding to shrubland, dominated by native coyote brush and manzanita. (They also noted that this conversion increases fire hazards.) **Eucalyptus and Monterey pine forests actually decreased during the period of study.** In those cases in which forests increased in size, they were native forests of oaks or Douglas fir. In other words, **they found no evidence that non-native trees are invading native trees or shrubs in open spaces in the Bay Area.**

The California Invasive Plant Council classifies *Acacia dealbata* (Silver wattle) as “moderately invasive” and the impact of *Acacia melanoxylon* (Black acacia) as “limited” and adds “impacts are low in most areas.” In fact, acacia does not spread unless it is cut down when it then resprouts vigorously from the roots unless it is poisoned repeatedly or the roots are dug out of the ground with heavy equipment.

Neither Monterey cypress nor Monterey pine are invasive. Even the California Invasive Plant Council agrees with that assessment. And both are California natives with fossil evidence that they existed on the San Francisco peninsula in the distant past.

On Mt. Davidson, plans to destroy 1,600 trees over 15 feet tall include many Monterey cypresses. In this particular “natural area,” it is therefore not accurate to say that “most” trees that will be removed are invasive. Table 6.2-1 in SNRAM claims that only .10 acres of Mt. Davidson are forested with Monterey cypress. This is not accurate. Acres of Monterey cypress on Mt. Davidson are much greater. Since these species are also native to California and have existed in San Francisco in the past, it is an exaggeration to call them non-native. [SFFA-3-02]

- Although oaks are native to California, I would be surprised if they were native to San Francisco. We don’t get the kind of sun that oaks need to thrive. It’s too moist here, especially west of Twin Peaks. You can literally count all the oaks currently in the city. We have one in St. Francis Wood. I know of one on Russian Hill. The arboretum probably has the most- and that’s not many. Eucalyptus, on the other hand, thrive here. We have the kind of microclimate in which they do well with all our other plants.

The natural habitat west of twin peaks was sand dunes. The earliest settlers in the Presidio called it a god-forsaken wasteland wind-swept with sand- it was practically uninhabitable. The soldiers dreaded being there. So trees were planted as windscreens and to hold the

sandy soil. Sutro Forest helped the surrounding homes by breaking the wind. Why would anyone want to go back to those sandy wind- swept days? [WTPCC-1-15]

- I love the lush vegetation in our parks and do not want ANY of it removed for any reason - but particularly for the ridiculous reason that a radical group (funded with my tax dollars) defines “natural” as only what was here before the city of San Francisco was built, and before our beautiful parks were created. [Art-1-05] [Delacroix-1-05] [Fox-1-05] [Ray-1-05]
- Throughout the DEIR, the term invasive is used repeatedly as a pejorative, without any definition, and without any parameters for establishing whether a particular species is actually invasive at that location. In particular, there is no evidence that the eucalyptus and Monterey pine/cypress scheduled for removal have in any way invaded the landscapes they are in. They were planted there.

In fact, the research elsewhere in the Bay Area actually shows that these forests are declining, not invading. In *Vegetation Change and Fire Hazard in the San Francisco Bay Area Open Spaces*, William Russell (USGS) and Joe McBride (UC Berkeley) used aerial photos of Bay Area parks taken over a 60 year period from 1939 to 1997, to study changes in vegetation types. They studied photos of 3 parks in the East Bay (Chabot, Tilden, Redwood), 2 parks in the North Bay (Pt Reyes, Bolinas Ridge), and one on the Peninsula (Skyline). These photos revealed that grasslands are succeeding to shrubland, dominated by native coyote brush and manzanita. Eucalyptus and Monterey pine forests actually decreased during the period of study, and thus cannot be considered invasive. [Bose-1-08]

- Pines and Cypress are the backbone trees of our parks. They’re not only beautiful, but provide habitat for countless species of wildlife. Removing these trees because they’re “not native” would be criminal. [Cook-1-04] [Jungreis-1-04]
- (2) The trees have been there for over 100 years. It is not on a sprinkler or drip irrigation system because the trees create their own mini-atmosphere of fog and keep the area moist for vegetation and animals. NAP’s claims that it isn’t “natural” are ill-founded because not only does it survive on its’ own but it also provides a significant habitat for animals and birds. We do not believe an area must be “original natural” to merit survival. [Hess-1-02]
- The report repeatedly mentions “invasive trees”, usually in reference to eucalyptus. This tree has not been shown to be invasive. The trees that are here were planted, many of them a century or more ago. The main issue appears to be that they are occupying land that Native Plant advocates want to convert to Native Plant areas. [Kessler-1-02] [Kessler-2-02]
- So I think to -- you know, I don’t know what native plants are really native. There couldn’t have been very much from the pictures I’ve seen, but maybe some scrub grass and an occasional tree here or there, but not a lot. Uhm, so you know, I think we have to look carefully at a lot of these areas. [PH-Antonini-02]
- The other thing in regards to Sharp Park in particular, I’m glad the one speaker brought up the fact that before there was a break water, you know, the Laguna Salida [sic] means Salt Lake, and it was basically – or salt lagoon, you know, which was a salty environment that would not have supported the red-legged frog and the garter snake. So we actually created a

breeding ground and, you know, to eliminate the break water would, of course, eliminate those species. So I think that part of this whole thing is protecting something that was never there in the first place, but I'm not saying that we shouldn't protect them, but they're not really indigenous to the area. [PH-Antonini-04]

Response BI-24

These comments focus on the distinction between native and nonnative or invasive species, with specific reference to eucalyptus, Monterey cypress, Monterey pine, acacia, and California red-legged frog and San Francisco garter snake. The comments also question whether nonnative trees are invading native trees and the plans for tree removal at Mount Davidson.

Draft EIR Appendix D contains Table C-3, which lists all of the plant species recorded within the Natural Areas and indicates which Natural Areas they are found within and whether they are a native species or not. According to the California Native Plant Society (CNPS), native plants are those plants that grew here prior to European contact.¹²³ Response G-12, RTC p. 4-60, provides the definition of invasive species that is contained in Executive Order 13112, which is a species that is nonnative (or alien) to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.¹²⁴ A majority of nonnative species cause no harm (meaning they are not invasive), and some are even beneficial.

The trees planned for removal, including those at Mount Davidson, are invasive species and do not contain any native or historic tree species. Some of the replacement trees would be oak species (because oak woodland habitat is dominant within the region, and is also native), but other species would also include, but are not limited to, California Bay laurel and California wax myrtle. In fact, in response to one of the commenters question about whether oak trees were native to San Francisco, various types of tree nuts were an important food source, and the acorn of the coast live oak had been the most favored by the Ohlones, who occupied the territory from San Francisco to Monterey for an estimated 2000 years; in addition, trees were also documented at the Presidio when the Spanish landed. While one of the commenters contends that oak trees were planted as windscreens to hold the sandy soil, and it is possible that some trees were planted for this purpose, oak trees were also documented to occur during Native American and Spanish settlement, making them native to the area.

¹²³ <http://www.cnps.org/cnps/nativeplants/>, accessed on August 7, 2014.

¹²⁴ <http://www.invasivespeciesinfo.gov/docs/council/isacdef.pdf>, accessed on September 14, 2015.

The SNRAMP identifies invasive plant species, including eucalyptus, as responsible for historic and present loss of biodiversity. These species are capable of spreading rapidly and displacing native plants because they are adapted to similar climatic conditions, lack predators or pests, and have other auto-ecological characteristics that allow them to thrive. Refer also to Response BI-15, RTC p. 4-402, and Response BI-36, RTC p. 4-470, for a more detailed discussion of the damage that can be caused by invasive species.

Eucalyptus is native to Australia and the neighboring islands of Indonesia, Timor, and New Guinea. While eucalyptus trees were intentionally planted in many locations across San Francisco, the behavior of those established trees to spread and take over additional land areas supports their identification as “invasive.” It is considered a nonnative species that can block native propagules¹²⁵ from establishing,¹²⁶ and it is specifically considered an invasive species according to the California Invasive Plant Council.¹²⁷ The California Invasive Plant Council goes on to say that:

“Within groves [of eucalyptus], biological diversity is lost due to displacement of native plant communities and corresponding wildlife habitat. Abundance and diversity of understory vegetation is dependent on stand density. Understory establishment is inhibited by the production of allelopathic¹²⁸ chemicals and by the physical barrier formed by high volumes of forest debris consisting of bark strips, limbs, and branches. The fuel complex formed by this debris is extremely flammable, and under severe weather conditions could produce drifting burning material with the potential to ignite numerous spot fires. Because stringy bark is carried away while burning, eucalyptus forests are considered the worst in the world for spreading spot fires. The Oakland hills firestorm was both intense and difficult to control because of the many stands of eucalyptus. Individual trees growing near structures or in public use areas are hazardous because of the potential for branch failure. Stature and growth form are distinctive and unlike native tree species, which compromises the visual quality of natural landscapes.”

¹²⁵ With respect to plants, a propagule is any plant material used for the purpose of plant propagations.

¹²⁶ Todd Keeler-Wolf and Allan A. Schoenherr, *Terrestrial Vegetation of California*, edited by Michael G. Barbour, Third Edition. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA, 94103, as part of Case File No. 2012.1427E 400 with three-days advance notice.

¹²⁷ <http://www.cal-ipc.org/ip/management/ipcw/pages/detailreport.cfm?usernumber=48&surveynumber=182.php>, accessed on August 7, 2014.

¹²⁸ Allelopathy is the inhibitory effect of one living plant upon another by the release of toxic substances.

The Monterey pine is also considered invasive by the NPS. The NPS states that in southern Marin County, large expanses of coastal scrub vegetation have been colonized by Monterey pine (*Pinus radiata*) cultivars.¹²⁹ The NPS goes on to state that Monterey pine cultivars have been planted throughout the world and are invasive on at least three other continents besides North America.¹³⁰

In terms of the Monterey Cypress, according to the California Invasive Plant Council, Monterey cypress is native to the Monterey coast area, but is considered moderately invasive in other parts of California where it spreads from planted windbreaks or hedgerows into surrounding vegetation.¹³¹

Refer also to Response BI-11, RTC p. 4-388, for a further discussion of invasive species and potential impacts on native species and Response BI-12, RTC p. 4-391, for a discussion of the revegetation plans at Mount Davidson. The importance of preserving and restoring biodiversity and native plant communities in San Francisco's Natural Areas is further discussed in Response PD-11, RTC p. 4-159, and Response PD-4, Opposition to the project – habitat restoration, RTC p. 4-139.

With respect to whether the California red-legged frog and the San Francisco garter snake are indigenous to the area, the California red-legged frog is endemic (or native) to California and northern Baja California¹³² and the San Francisco garter snake is also native to California.¹³³ However, the geographic ranges of both of these species have reduced, which is, in part, the reason they are considered threatened (California red-legged frog) and endangered (San Francisco garter snake) by the USFWS. Table 9, which is provided in Section V.G, Biological Resources, of the Draft EIR states that while the California red-legged frog was historically observed at Lake Merced and was since believed to be extirpated, it was recently observed at Sharp Park. The San Francisco garter snake was reported near Horse Stable Pond in Sharp Park in 2008.

All of the Natural Areas, including Laguna Salada, have been significantly altered by development and other human activities from their condition prior to European settlement. However, in accordance with CEQA Guidelines Section 15125(a), the physical environmental conditions that

¹²⁹ Robert Steers, Jen Jordan, James Cartan, and Kaitlyn Hacker, Invasive pine tree impacts on coastal scrub vegetation in the Marin Headlands, San Francisco Area Network, Inventory and Monitoring Program, Ft Cronkhite, Sausalito, n.d., <http://www.cal-ipc.org/symposia/archive/pdf/2010/posterSteers.pdf>, accessed on August 7, 2014. Also http://www.sfnps.org/download_product/1982/0, accessed on August 7, 2014.

¹³⁰ Robert Steers, Jen Jordan, James Cartan, and Kaitlyn Hacker, Invasive pine tree impacts on coastal scrub vegetation in the Marin Headlands, San Francisco Area Network, Inventory and Monitoring Program, Ft Cronkhite, Sausalito, n.d., <http://www.cal-ipc.org/symposia/archive/pdf/2010/posterSteers.pdf>, accessed on August 7, 2014.

¹³¹ <http://www.cal-ipc.org/ip/management/ipcw/pages/detailreport.cfm@usernumber=48&surveynumber=182.php>, accessed on August 7, 2014.

¹³² <http://www.californiaherps.com/frogs/pages/r.draytonii.html>, accessed on October 5, 2015.

¹³³ http://www.fws.gov/sacramento/outreach/Featured-Stories/SF-Garter-Snake/outreach_featured-stories_sf-garter-snake.htm, accessed on October 5, 2015.

existed at the time that the notice of preparation of the Draft EIR was published from the baseline from which the Planning Department should determine the environmental consequences of the proposed project. Accordingly, the Draft EIR considers the environmental effects of the proposed actions under the SNRAMP to replace existing nonnative plants with native plant species and the effects of the proposed Sharp Park restoration actions on special-status species and sensitive habitats that are present at the site today.

Comment BI-25 Extent of wetlands filled for the conversion of marsh to fairways

The response to Comment BI-25 addresses all or part of the following individual comment:

Baye-1-01

- **1. The DEIR fails to identify the extent of wetlands filled for the purpose of conversion of marsh to golf fairways rather than enhanced upland habitat for endangered species, and fails to identify mitigation for wetland filled to enhance upland golf greens.**

The DEIR fails to disclose that a significant area of existing wetlands bordering the northeastern end of the lagoon would be filled and converted to upland golf greens, rather than filled to provide enhanced habitat for endangered wildlife. This fill is shown in Figure 14 of Appendix I (Tetra Tech 2009) and described in a text box in a misleading and inaccurate way as "raise fairways to reduce flooding" along the inland side of the "habitat boundary" mapped near hole 14. Neither the restoration plan nor the DEIR identify the fairway areas to be filled and raised above flood elevations as including existing wetlands consisting of freshwater marsh mown down to a low turf to function as part of a fairway. The mown marsh is in fact composed of dominant marsh vegetation identical to the marsh that isn't mown on the other side of the artificial habitat boundary. The "habitat boundary" in fact is the line of mowing that encroaches into the marsh, not the boundary between upland and wetland soils and vegetation. It is entirely artificial, nominal boundary. The mown marsh was identified as one of the existing degraded conditions of the Laguna Salada wetland complex in the January 2011 report on Laguna Salada restoration alternatives (PWA 2011), which was provided to the City of San Francisco. It was also shown and explained to representatives of the Recreation and Parks Department in a slide presentation at the November 2010 Sharp Park "working group" meeting at McLaren Hall.

The mown marsh area lying within the proposed fill area falls entirely within the criteria for wetlands protected by policies of the California Coastal Commission, and it meets all criteria for wetlands under the current U.S. Army Corps of Engineers wetland delineation manual.

The identification of the marsh as wetland is obscured by regular mowing that makes it resemble golf turf, but the mowing does not alter the basic jurisdictional criteria of the wetland determined by dominant obligate and facultative-wet wetland species, hydric soils, and winter flooding and saturation for multiple weeks. The fill of this mown marsh and its conversion to upland golf greens is neither identified as an impact, nor evaluated for impact significance, nor mitigated in any way.

[Caption:] Mowing of freshwater marsh with saturated soils at the surface mown to height of golf turf, annexing marsh to golf links at N Sharp Park; fresh-brackish marsh species composition of the mown marsh turf at marsh edge is identical with adjacent marsh: silverweed, threesquare bulrush. Mown marsh grades into facultative wetland grasses (creeping bentgrass) and brass-buttons. Mown marsh zone extended approximately 3 to 5 m (variable) from the unmown emergent marsh edge in 2010.

[Caption:] The golf turf mowing encroaching the northeast end of Laguna Salada, extending directly into the marsh and riparian woodland zones. The apparent golf turf is mown marsh with vegetation composed of the same fresh-brackish obligate and facultative-wet marsh plant species on the lagoon side of the photos: coast bulrush (*Schoenoplectus pungens*) silverweed (*Potentilla anserina* ssp. *pacifica*), creeping bentgrass (*Agrostis stolonifera*) and brass-buttons, *Cotula coronopifolia*. The seasonally flooded outer marsh and its terrestrial ecotone are replaced by turf even with pumped drawdown of the lagoon. Photos: June-August 2010.

4. Summary of CEQA deficiencies and recommendations for remedies.

In summary, the DEIR:

- > fails to disclose fill and conversion of wetlands to uplands used not for purposes of upland habitat enhancement, but for golf recreational enhancement, and fails to assess impacts or mitigate for net fill and conversion of wetland to golf uplands. [Baye-1-01]

Response BI-25

This comment indicates that the Draft EIR fails to identify the extent of wetlands filled for the conversion of marsh to fairways at Sharp Park and includes photos.

CEQA requires an analysis of the potential impacts that could result from implementation of the project and project alternatives as compared to baseline conditions. As the commenter notes, there are areas currently used as fairways in the east portion of the Laguna Salada that will be raised under the project to reduce flooding to the fairways (associated with Holes 10, 14, 15, and 18). In addition, existing Hole 18 would be raised to allow a two percent slope relative to Hole 14. These areas are currently used as an operational golf course (i.e., mown fairways and a hole) and, after being raised, would remain as an operational golf course (i.e., mown fairways and a hole) after the project is completed. The SNRAMP does not propose to convert any marsh areas to fairways or other golf course uses. The Draft EIR concluded that raising these fairways and Hole 18 would not cause significant physical environmental impacts, including, but not limited to, impacts to hydrology, biological resources, cultural resources, or aesthetics, as compared to baseline conditions.

To the extent that the existing fairways and Hole 18 may be considered wetlands by the CCC, and thus would pose additional regulatory requirements, those regulatory requirements are disclosed in the Draft EIR and explained further below. These potential regulatory requirements do not change the environmental impacts analysis from a CEQA perspective.

As the commenter notes, there are different wetland delineation methodologies established by the USACE and CCC. The USACE delineates wetlands using a three-parameter approach, where

hydrophytic vegetation, hydric soils, and wetland hydrology must all be present (in most circumstances) in order for an area to be considered a wetland. The CCC uses a single-parameter approach where only one of the parameters — hydrophytic vegetation, hydric soils, or wetland hydrology — must be present to be considered a wetland.

The USACE claimed jurisdiction for the entire Laguna Salada wetland complex, excluding developed areas, upland areas, and fairways, and also confirmed the extent of jurisdictional wetlands associated with the wetland complex (USACE, letter to Ms. Kelly Bayer of Tetra Tech dated March 9, 2009). The Laguna Salada wetland complex is the area included in the (Sharp Park) Wetland Restoration and Habitat Recovery Project; however, as illustrated by Figure 2 of the Draft EIR (on Draft EIR p. 100), the Laguna Salada restoration footprint is larger than the area where proposed restoration and management activities are anticipated to occur under the SNRAMP (see SNRAMP Figure 6.4-5 on p. 6.4-25).

The USACE's determination of wetlands was based on information provided in a report prepared for the SFRPD titled "Jurisdictional Waters of the US and Wetland Determination Report, Laguna Salada Wetland Restoration and Habitat Recovery Project," Tetra Tech, Inc., November 2008.¹³⁴ This report concluded that there are a total of 27.42 acres of wetlands and other waters of the United States present within the proposed Laguna Salada restoration area. EIR p. 338 (Table 11) shows only 23 acres of USACE jurisdictional wetlands, reflecting the smaller footprint of the SNRAMP restoration and management areas.

Within the total of 23 acres of USACE jurisdictional wetlands within the SNRAMP restoration and management areas, the total area of short-term and long-term impacts to USACE wetlands as a result of the SNRAMP restoration and management activities at Sharp Park, as reflected on Draft EIR p. 338 (Table 11), is 5.5 acres. In terms of the nature of the impacts, as stated on Draft EIR p. 338:

"Short-term impacts associated with the Laguna Salada restoration project include soil compaction and vegetation loss as a result of vehicle and heavy equipment use in and around the wetlands. As described in Section III.F.2 (page 104), following completion of each season's restoration activities, these areas would be scarified, recontoured, planted and hydroseeded with native vegetation to approximate their pre-disturbance condition, as needed based on the level of disturbance.

Long-term impacts to wetlands at Sharp Park would occur as a result of restoration activities that would include dredging existing wetlands and recontouring the shoreline to create optimal habitat for California red-legged frog and San Francisco garter snake."

¹³⁴ Tetra Tech, Inc., *Jurisdictional Waters of the US and Wetland Determination Report, Laguna Salada Wetland Restoration and Habitat Recovery Project*, November 2008.

Draft EIR p. 339 goes on to say:

“Restoration activities would be consistent with the ultimate goals of the Sharp Park restoration, which are to enhance habitat quality for protected species and other native wildlife, in addition to diversifying existing wetlands. The Sharp Park restoration project would restore and enhance the biological functionality of the wetland and upland complex to better support the various species present within that habitat system and would not be considered a substantial adverse effect to the Laguna Salada wetland complex. As a result, the Sharp Park restoration project is expected to result in long-term beneficial impacts to the wetland complex.”

Similar to the USACE, in a letter from the CCC (to John R. Bock, Tetra Tech, dated May 31, 2011), the CCC claimed jurisdiction west of Highway 1, which covers the entire Laguna Salada restoration footprint (see Figure 2 of the Draft EIR), as well as additional areas surrounding that footprint. Therefore, in addition to the delineation of USACE wetlands for the Laguna Salada restoration project (using the three-parameter approach), the SFRPD also prepared a report titled “Single-Parameter Wetland Delineation for the Sharp Park Pumphouse Safety, Infrastructure Improvement and Habitat Enhancement Project,” May 2013,¹³⁵ to determine whether there are additional wetland areas using CCC’s single-parameter methodology that are not considered wetlands under the USACE’s three-parameter methodology. The single-parameter wetland delineation focused on the areas potentially impacted by the Pumphouse Project and not the boundaries of the Laguna Salada restoration project.

The single-parameter wetland delineation showed two additional areas that satisfied the CCC definition of wetlands associated with the Pumphouse project – a fairway area and a wet meadow area at the northeast area of Laguna Salada (refer to Figure 3 of the single-parameter wetland delineation). The area of impact in the fairway area (caused by realignment and improvements to a cart path) was determined to total 1,700 square feet, or 0.04 acre of CCC jurisdictional wetlands (refer to Table 2 of the single-parameter wetland delineation). The cart path has since been realigned and improved, pursuant to the Pumphouse project description. No work was proposed within or adjacent to the wet meadow area as part of the Pumphouse project.

The wet meadow area is within the SNRAMP area proposed for restoration and management, but the precise area of additional wetlands that may be delineated using the single-parameter approach has not been determined. There may be other CCC wetlands that are outside of the Pumphouse project’s area of impact, but within the potential SNRAMP area of impact that would classify as CCC wetlands but have not been identified. Whether or not additional areas are subject to CCC wetland delineation, the Draft EIR concluded that raising the fairways and Hole 18 would not cause significant physical environmental impacts, including, but not limited to, impacts to hydrology,

¹³⁵ San Francisco Recreation and Park Department, *Single-Parameter Wetland Delineation for the Sharp Park Pumphouse Safety, Infrastructure Improvement and Habitat Enhancement Project*, May 2013.

biological resources, cultural resources, or aesthetics, as compared to baseline conditions. However, to the extent the CCC may determine that these areas qualify as wetlands using the single-parameter approach, SFRPD would seek necessary permits and comply with any conditions required by the CCC.

To address impacts to wetlands—whether as designated by the USACE or the CCC, and whether as anticipated in the Draft EIR or as may exist at the time restoration and maintenance activities commence—Draft EIR pp. 339 and 340 states that:

“Prior to implementing the proposed Sharp Park restoration activities, the SFRPD would be required to obtain a USFWS Biological Opinion, SFBRWQCB Section 401 water quality certification, a USACE Section 404 permit, and a coastal development permit from the California Coastal Commission; a CDFG streambed alteration agreement may also be required. These resource agencies may require protective wetland measures in addition to Mitigation Measures M-BI-12a and M-BI-12b, as discussed below.

Implementing Mitigation Measure M-BI-12a requires the SFRPD to limit impacts on wetlands and water quality. Mitigation Measure M-BI-12b requires SFRPD to prepare a mitigation plan as part of the application for Section 401 water quality certification. Mitigation Measure M-BI-12a also incorporates requirements of both Sections 401 and 404 of the Clean Water Act and the CCC. Mitigation Measure M-BI-12b requires that the SFRPD prepare a monitoring program which would ensure that success criteria would be established to ensure that restoration of the Laguna Salada wetland complex is achieving the project objectives. Success criteria may include annual goals for the percent cover of native wetland vegetation, limitations on the amount of invasive species cover permissible, and the presence of hydric soils and wetland hydrology. With implementation of Mitigation Measures M-BI-12a and M-BI-12b, the Sharp Park restoration would not have a substantial adverse effect on wetlands protected under Section 404 of the Clean Water Act, resulting in a *less than significant* impact.”

During the permit application process, all of the agencies, including the CCC, would make a final determination of existing and impacted wetland areas associated with the SNRAMP project.

Draft EIR Appendix I Figure 14, Conceptual Alternative A18, to which one of the commenters refers, is the same as Draft EIR Figure 3, Laguna Salada Restoration Features. Each of these figures shows that the areas to be raised to reduce flooding are existing fairways and a hole (Hole 18), none of which are claimed as jurisdictional by the USACE. The commenter’s assertion that the SNRAMP would convert marsh areas to fairways is not accurate. As previously mentioned, the areas that would be raised are currently used as an operational golf course (i.e., mown fairways and a hole) and, after being raised, would remain as an operational golf course (mown fairways and a hole) after the project is completed.

Further, in terms of current and continuing mowing operations, the Pumphouse Biological Opinion (on pages 14 and 15) identifies the circumstances under which mowing can occur at the Golf Course. Importantly, the Biological Opinion establishes “no mow” zones, stating that:

- “a. A no-mow zone area, which includes the roughs adjacent to the wetlands, will be identified with stakes or other markers on the ground (see Figure 2-5 in biological assessment for boundaries of no-mow zone). Golf staff will be instructed not to mow in these areas. The land between Mori Point and Laguna Salada is an important movement corridor for the California red-legged frog and San Francisco garter snake. This area will be further evaluated by SFRPD biologists, in consultation with Service, to identify additional opportunities for movement and increases in the no-mow area. Based on this assessment, the extent of the no mow zones may be increased as long as the restrictions on mowing do not affect the playability of the golf course.”

With respect to how mowing would be allowed outside of the no-mow zone, Pumphouse Biological Opinion p. 15 further requires the following:

- “d. All mower operators will be trained to identify the California red-legged frog and San Francisco garter snake and instructed to stop any activities if they observe any frog or any snake on the course.
- e. If any frog or any snake is encountered in the pathway of a mower, the operator will cease the mowing activity and wait for the animal to remove itself from harm's way or discontinue the mowing activity in that area for the day. If the animal does not move out of harm's way, the SFRPD biological monitor with the Natural Areas Program will be contacted. Work may not recommence in the area until the area has been determined to be clear of California red-legged frog or San Francisco garter snake.”

Comment BI-26	Coastal development permit requirements
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The response to Comment BI-26 addresses all or part of the following individual comment:

CCC-1-01

- Dredging of wetlands where there is no feasible, less environmentally-damaging alternative and where feasible mitigation measures have been provided to minimize adverse environmental effects is permitted for restoration purposes, pursuant to Section 30233 of the Coastal Act. The City will need to provide supporting analysis/evidence and documentation that the City's proposal is indeed the least environmentally-damaging alternative for restoration of the site. [CCC-1-01]

Response BI-26

This comment relates to the wetland restoration activities proposed at Sharp Park. The comment specifically references Section 30223 of the Coastal Act, which allows the diking, filling, or dredging

of open coastal waters, wetlands, estuaries, and lakes for restoration purposes where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects. This comment is not related to adequacy or accuracy of the analysis in the EIR, but would be considered by the CCC and SFRPD when applying for a coastal development permit in connection with habitat restoration at Sharp Park.

The proposal for the Laguna Salada Restoration was developed based on early coordination with the USFWS, CDFW, and consulting biological experts with the goal of developing a restoration plan that would achieve recovery of the San Francisco garter snake population. The Draft EIR identifies a number of mitigation measures to protect environmental resources at Sharp Park including Mitigation Measure M-CP-7, Documentation of the Sharp Park Golf Course, p. 222; Mitigation Measure M-CP-10, Archeological Monitoring Program for the Programmatic Projects in Natural Areas with High Archaeological Sensitivity, Routine Maintenance Activities at Tank Hill and Lake Merced, and the Sharp Park Restoration Project, p. 225; Mitigation Measure M-CP-17, Paleontological Training Program and Alert Sheet for the Sharp Park Restoration Project, p. 235; Mitigation Measure M-CP-18, Human Remains, Associated or Unassociated Funerary Objects, p. 236; Mitigation Measure M-BI-6a, Protection of Protected Species during Implementation of the Sharp Park Restoration Project, p. 326; Mitigation Measure M-BI-6b, Protection of Protected Species during Maintenance of the Sharp Park Restoration Project, p. 328; Mitigation Measure M-BI-12a, Protection of Wetlands during the Sharp Park Restoration Project, p. 339; Mitigation Measure M-BI-12b, Laguna Salada Restoration Project Wetland Mitigation Plan, p. 340; Mitigation Measure M-HY-1, Implementation of Stormwater Pollution Prevention Measures, p. 366; and Mitigation Measure M-HZ-13, Emergency Response Plan for Accidental Releases of Hazardous Materials, p. 395.

Since the majority of the restoration activities would take place within areas under the jurisdiction of the CCC, a coastal development permit from the CCC would be required. Through its review of the coastal development permit, the CCC would ensure that the project would be consistent with the applicable provisions of the Coastal Act, including whether it is the least environmentally damaging alternative and whether feasible mitigation measures have been provided to minimize adverse environmental effects. The City would need to provide supporting evidence that the City's proposal for the Sharp Park restoration is the least environmentally-damaging alternative as part of a coastal development permit.

Comment BI-27	Glossary terms and definitions
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The response to Comment BI-27 addresses all or part of the following individual comments:

CNPS-1-01	Bose-2-01	Gravanis-1-03
Gravanis-1-04	PH-Gaar-01	

- There are problem areas. For example, the term Urban Forest is used throughout, in spite of the fact that it is not a scientific term and no definition of what constitutes an urban forest exists. The term should be stricken from the document, as it means different things to different people. For many, it means street trees, for others it means the artificial eucalyptus plantations (not forests) which are having a devastating effect on the biological diversity of the areas where they are planted, such as Mt. Davidson, McLaren Park, and Glen Canyon. [CNPS-1-01]

- The language around the issue of tree removal is extremely confusing to the lay-person.

1. Two separate measures are used: The height of the tree, and “basal area.”

Tree height is intuitive and easily understood. For the purposes of the SNRAMP (and the DEIR) a “tree” is defined as a plant with a single stem exceeding 15 feet in height.

However, the determination of extent of tree removal in the DEIR is worded in terms of “basal area.”

This term is never properly explained, either in the SNRAMP or in the DEIR, nor is the public given the formula in summary. This forces the public to make their own calculations and estimates, and impairs their ability to properly assess impacts.

2. “Basal area” also appears to be a poor choice as a measure.

(a) There is no easy equivalence between basal area and the measures the public finds more familiar: number of trees per acre, tree height, canopy cover.

(b) According to US Forest Service, this is the definition of Basal Area:

“Basal area (BA) is the area of the cross section of a tree stem, including the bark, measured at breast height (4.5 feet above the ground).” [<http://www.fs.fed.us/postfirevegcondition/glossary.shtml>]

“Basal area per acre” is therefore the number of square feet of basal area of all the trees in one acre.

Using a fixed basal area per acre target suggests that as trees grow larger, more will be felled. This is the opposite of what good management would suggest when San Francisco is seeking to increase its urban forest cover.

(c) “Basal Area” does not consider the size or spread of branches or canopy. The canopy is an important determinant in a tree’s pollution-fighting ability by trapping pollutants on its leaves. It also is critical to its ability to slow water impacts and run-offs by mediating rainfall. The canopy is important from a wildlife standpoint. Finally, a tree’s canopy also affects its aesthetics. [Bose-2-01]

- Glossary – I’m glad that the DEIR includes a glossary, but I hope it will be improved to make the contents of the document more accessible to the reader. Some examples:

Urban forest – A significant stand of nonindigenous trees. Is that what is really meant by the term? If so, where it says, “GR-15b – Maintain a stocking rate that will perpetuate the urban forest and promote forest health,” does it mean that we’re not allowed to plant native trees in the “urban forests” (because they’d no longer be urban forests)? And what do the terms “forest” and “forested” mean? They are used several times, but not defined in the glossary. The entire document would be so much more professional and credible if the terms “urban forest” and “forest” were not used at all. San Francisco has a number of indigenous habitat types that should be defined and described, but forest is not one of them. A forest is a complex ecosystem, not merely a stand of trees. Calling a plantation a forest perpetuates eco-illiteracy and calls into question the scientific orientation of the DEIR. [Gravanis-1-03]
- Missing from the Glossary – There’s a puzzling omission of habitat types. The only one listed in the glossary is “wetland.” “Scrub” is in the glossary, but as a vegetative form, not as a kind of habitat or biotic community. “Riparian” is in there, but not as a type of wetland. It would be helpful to see the habitat types listed in Table 10 defined in the Glossary. Also puzzling is that throughout the document, “grassland” is preceded by “native” but the other habitat types are not. Please explain. [Gravanis-1-04]
- Number one, what is recreation? Well, recreation in the draft EIR is predominantly traditional recreation: Bicycle riding, hiking, dog walking, et cetera. But for a lot of us who are naturalists, we do a lot of vigorous habitat restoration, which is real hard, physical labor, controlling the weeds from over-running the native plant communities, and that is very invigorating recreation. And also you get to meet other -- you get to work with other city workers, and you work with your community. [PH-Gaar-01]

Response BI-27

These comments suggest that a series of terms are better defined in the Glossary of the Draft EIR.

In response to the above comments, definitions of “forest,” “invasive species,” “recreation,” “riparian,” and “scrub” have been added to the glossary, or the definition has been expanded. The definitions of “basal area,” “passive recreation,” and “urban forest” were included in the Draft EIR glossary, but those definitions are also provided in this response for the reader’s convenience. The definitions for “invasive species” and “scrub” were taken from the SNRAMP Section G, Glossary, and the definition for “riparian” has been expanded to also include the definition from SNRAMP Section G, Glossary. The definitions for “forest” and “recreation” were taken from the Merriam-Webster dictionary. The text on Draft EIR pp. ix to xiii has been changed, as follows:

Forest—A dense growth of trees and underbrush covering a large tract.

...

Invasive species—A species that is nonnative (or alien) to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.

...

Recreation—Activity done for enjoyment when one is not working. Within the Natural Areas, typical recreational activities include, but are not necessarily limited to, walking, hiking, running, nature watching, dog walking, picnicking, other passive recreational activities, and volunteering.

Riparian—Land next to a natural watercourse, such as a river or stream. Riparian areas support vegetation that provides important wildlife habitat, as well as important fish habitat when it overhangs the bank. The SNRAMP goes on to define riparian as “relating to or living or located on the bank of a natural watercourse (as a river) or sometimes of a lake or a tidewater.”

...

Scrub—Low trees or shrubs collectively, growing or stunted vegetation on poor soil or in semiarid regions, which sometimes form impenetrable masses.

The terms “basal area,” “urban forest,” and “passive recreation” are defined in the Glossary on Draft EIR pp. ix, xi, and xii, and with the definitions for “basal area” and “urban forest” revised as follows:

Basal Area—A measure, typically in square feet per acre, of the area covered by trees at breast height, or 4½ feet above the ground—urban forest. Basal area is a standard form of measurement that is used as an index of tree production.

Passive Recreation—Recreational activities that occur in a natural setting and that require minimal site development or facilities. Under passive recreation, the importance of the environment or setting for the activities is greater than in developed or active recreation settings.

Urban forest—A significant stand of mostly nonindigenous trees.

As stated on SNRAMP p. 5-18, basal area measurements are a standard method used in the California Forest Practice Rules by the California Department of Forestry and Fire Protection for determining postharvest standstocking levels after timber harvest operations (California Department of Forestry and Fire Protection 2005). Postharvest stocking levels refers to the density of trees in an area after tree removal activities have occurred.

Basal area is usually expressed in square feet. To visualize basal area, imagine that all the trees in a stand were cut off at 4.5 feet above the ground. The area of the top surface of the stump is measured to determine the basal area of that tree. If the basal areas of all trees on an acre are added together, the result is square feet of basal area per acre. It takes several small trees to equal the basal area of a large tree. For example, the basal area of four 6-inch diameter-at-breast-height (DBH) trees equals the basal area of one 12-inch DBH tree. Having a target basal area per acre ensures that the stand is not too dense, irrespective of the number of trees, allowing light to reach the forest floor. A stand may need to be thinned if it is comprised of a greater number of trees with a narrower DBH or a fewer number of trees with a wider DBH. One of the commenter’s was concerned that only larger trees will be felled; however, there are many other factors that would be considered when determining when to thin a stand, including the number of trees, the basal area per acre, and the goals of the management area.

One of the commenters questioned why habitat types were missing from the glossary. The glossary is intended to present a definition of terms that are commonly used in the Draft EIR. It is not meant to provide either a jurisdictional definition of habitats (as in the case of wetlands, which are defined differently by the USACE and CCC) or commonly accepted definitions of habitat types (as in the case of riparian or scrub, which are terms used as part of a broader habitat classification system). SNRAMP pp. 3-5 and 3-6 states that in order to assess percent cover and distribution characteristics of each species, vegetation was sampled using a quadrat system. Sampled vegetation was then classified into formations, subformations, and series. Formations are based on the life form of the dominant species: herbaceous is dominated by herbs; scrub is dominated by shrubs; mosaic is a mix of herbs and shrubs; and forest is dominated by trees. Series are based on the identity of the dominant species, and subformations are groups of series that share similar ecological requirements and/or land management histories. Subformation as used in the SNRAMP corresponds roughly to the series level used by Sawyer and Keeler-Wolf (1995) and the natural community level of Holland (1986). Series as used in this document are similar to, but more finely divided than, the associations of Sawyer and Keeler-Wolf (1995). Vegetation series are more finely defined here because it was considered important to capture and document the remnant variation in vegetation communities. Surveys identified five formations, 12 subformations, and 101 series (Table 3-2 of the SNRAMP). Acreage was calculated by subformation for each site (Table 3-3 of the SNRAMP). A total of 1,107 acres were surveyed and mapped within the Natural Areas. Each of the formations and subformations are described on SNRAMP pp. 3-7 to 3-12, and the acreages for each (within the Natural Areas) is presented on Table 3-3 (on SNRAMP pp. 3-30 and 3-31).

A commenter also questioned why the term “native” often precedes the “grassland” in the Draft EIR. The term “native grassland” is used 48 times in the document, and in each instance, the term is accurately used to describe the type of habitat that either exists or is proposed under the SNRAMP activities. The term “nonnative grassland” is also used in the document in reference to habitat that would be replaced with native grassland habitat.

Comment BI-28 SNRAMP does not address monitoring of native species
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The response to Comment BI-28 addresses all or part of the following individual comment:

Bowman-1-14

- NAP does not address monitoring of native species and maintaining the balance of these species. Any species whether it be native (e.g., sea gulls, ravens, shorebirds, scrub, etc.) or non-native can become a problem for other species survival. I cannot find where the plan addresses monitoring and addressing native species, other than non-natives, that over-populate and threaten other species. This over-focus on “native” could be damaging to our current ecosystems and species. [Bowman-1-14]

Response BI-28

This comment asserts that the SNRAMP does not address monitoring of native species.

Refer to Response PD-25, RTC p. 4-201, for a discussion of the SNRAMP's proposed monitoring activities, including the use of an adaptive management processes. Refer also to Response PD-11, RTC p. 4-159, for a discussion of the need for biodiversity. In summary, the proposed project, as described on Draft EIR pp. 90 and 94, includes both monitoring and adaptive management, which would allow the SFRPD to modify its activities based on the identification through monitoring of project successes and failures. Monitoring is also anticipated to identify any unintended consequences of the proposed project's activities.

Comment BI-29 Effects of previous natural areas program projects on the Mission blue butterfly

The response to Comment BI-29 addresses all or part of the following individual comment:

SFFA-3-13

■ **2. The Natural Areas Program is violating the Endangered Species Act by using pesticides known to be harmful to butterflies on Twin Peaks**

The Mission Blue butterfly is a federal endangered species which existed historically on Twin Peaks in San Francisco. San Francisco's Natural Areas Program has been trying to reintroduce the Mission Blue to Twin Peaks for several years, so far with limited success. This reintroduction effort is reported by the DEIR. (DEIR, page 285)

Herbicides are being sprayed on Twin Peaks to control non-native vegetation. **Twin Peaks was sprayed with herbicides 16 times in 2010 and 19 times in 2011.**

A recently published study reports; that the reproductive success of the Behr's metalmark butterfly was significantly reduced (24-36%) by herbicides used to control non-native vegetation. Two of those pesticides are used on Twin Peaks, imazapyr and triclopyr. Triclopyr was used most often on Twin Peaks in 2010 and imazapyr in 2011.

The study does not explain how this harm occurs. It observes that the three herbicides that were studied work in different ways. It therefore speculates that the harm to the butterfly larva may be from the inactive ingredients of the pesticides which they have in common, or that the harm comes to the larva from its host plant which is altered in some way by the herbicide application. Either theory is potentially applicable to the herbicides used on Twin Peaks and consequently harmful to the endangered Mission Blue.

The Endangered Species Act requires that the Natural Areas Program stop spraying these herbicides on Twin Peaks because they are known to be harmful to the reproductive success of butterflies. Unless further scientific study exonerates these herbicides, the law obligates us to prohibit their use where the endangered Mission Blue butterfly is known to exist, i.e., on Twin Peaks.

The final EIR must prohibit the use of pesticides known to be harmful to butterflies on Twin Peaks where the endangered Mission Blue butterfly has been reintroduced by the Natural Areas Program. [SFFA-3-13]

Response BI-29

This comment expresses concern about the past use of pesticides on Twin Peaks, particularly in terms of how it may have affected the Mission blue butterfly. These activities, and any resulting effects (if there were any), do not address impacts of the proposed project. Nonetheless, a summary of recommendations provided in the Recovery Action Plan for the Mission Blue Butterfly (*Icaricia icarioides missionensis*) at Twin Peaks Natural Area,¹³⁶ the SNRAMP's proposed management actions in this area, and the analysis and conclusions provided in the Draft EIR related to the Mission blue butterfly is provided below.

With respect to habitat enhancement and vegetation management, the Recovery Plan seeks to increase or introduce silver lupine, varied lupine, and summer lupine and remove or thin discrete patches of coyote brush (to allow more lupine habitat) in the Twin Peak Natural Area. The Recovery Plan goes on to say that native nectar species, including coast buckwheat, California phacelia, checker mallow, and desert parsley should be seeded and propagated to improve habitat conditions around lupine colonies and to create more robust corridors between host plant colonies. Lastly, the Recovery Plan states that while the invasive Italian thistle is currently serving as a widespread nectar source on Twin Peaks, it does have the potential to compete with native host plants and nectar sources, decrease bare ground, and hamper butterfly navigation around host and nectar sources. While native nectar sources are also widespread, and SFRPD vegetation management policy includes treating invasive plants, the Recovery Plan does not recommend intensive treatments to remove the Italian thistle until native nectar sources are enhanced, with the caveat that the species should be watched to make sure that it does not form dense monocultures.

Issue TP-2, provided on page 6.8-8 of the SNRAMP, states that "Priority shall be given to maintaining the habitat necessary for mission blue butterflies, especially the host plant (silver bush lupine)." Recommendations TP-2a and TP-2b (also provided on page 6.8-8 of the SNRAMP) state that the SFRPD shall continue to monitor the mission blue butterfly population at Twin Peaks in accordance with monitoring guidelines (as outlined in Section 7 of the SNRAMP), and augmentation of host plant populations shall occur whenever possible as part of any grassland revegetation work conducted on Twin Peaks.

The Mission blue butterfly is addressed on Draft EIR p. 285, which concludes that impacts from the proposed project would be reduced to a less-than-significant level with the implementation of Draft EIR Mitigation Measure M-BI-5, Protection of Special Status Species during Routine Maintenance,

¹³⁶ https://creeksidescience.files.wordpress.com/2012/01/twin_peaks_mission_blue_recovery_9apr091.pdf, accessed on October 8, 2015.

Draft EIR p. 315. The text on Draft EIR p. 319 (first bullet) has been changed for clarification, as follows:

- **Mission Blue Butterfly:** This species occurs at Twin Peaks and Sharp Park. The following measures shall apply to these Natural Areas:
 - > To avoid impacts to this species, SFRPD shall adhere to the long-term management and monitoring guidelines as described in the Recovery Action Plan for the Mission Blue Butterfly at Twin Peaks Natural Area and the corresponding Biological Opinion ~~and as that has been issued by~~ agreed to with the US Fish and Wildlife Service. These guidelines include conducting vegetation removal by manual, mechanical, and chemical treatments that would be applied consistent with the SFRPD Integrated Pest Management program, such as hand pulling, cutting and grubbing. To avoid impacts from trampling of host plants by recreational users, the SFRPD shall continue to conduct regular maintenance on the existing trail network including trimming trailside vegetation and replacing trail base materials.

In summary, the SNRAMP would conduct management activities in accordance with the Recovery Action Plan for the Mission blue butterfly and corresponding Biological Opinion issued by the USFWS, which states the Recovery Plan would not jeopardize the continued existence of the Mission blue butterfly and, in fact, would result in significant long-term benefits, recognizing that there could be short-term adverse effects during restoration and enhancement activities.¹³⁷ Further, the EIR concluded impacts to the Mission Blue would be reduced to a less-than-significant level with implementation of Mitigation Measure M-BI-5, Protection of Special Status Species During Routine Maintenance, which has been excerpted, in relevant part, in the preceding paragraph.

Further, refer to Response HZ-1, RTC p. 4-531, for a detailed discussion of the City's IPM program, Reduced Risk Pesticide List, use of the Precautionary Principle, the SFRPD's least-toxic decision-making model process for the treatment of invasive species, and the amount of herbicides/pesticides that were used by SFRPD throughout all of the Natural Areas in a given year.

Comment BI-30 Impacts related to the removal of nonnative trees and invasive vegetation

The response to Comment BI-30 addresses all or part of the following individual comments:

Bowman-2-05

Garber-1-01

Wade-1-01

- These long term plans for eliminating forest acres should also be incorporated into the significance analysis of aesthetics, hydraulics, air quality, biological resources, wind and shadow, and recreation environmental impacts. [Bowman-2-05]

¹³⁷ United States Department of Interior, Fish and Wildlife Service. *Internal Biological Opinion on the Proposed Recovery Actions for the Endangered Mission Blue Butterfly at the Twin Peaks Natural Area, San Francisco County, California*, March 20, 2009.

- I recently became aware of the San Francisco Recreation and Park Department Natural Areas Program Environmental Impact Report. I live in Pacifica and the proposal to cut at least 15,000 trees in Pacifica on the Sharp Park property as one alternative in the NAP EIR is an abomination. The EIR contains no scientific studies on the potential benefits of removing trees. It likewise does not adequately acknowledge the problems of removing the trees; i.e. loss of habitat for adapted wildlife in Sharp Park, loss of a carbon sink as trees remove CO₂ from air, erosion, run off of soils, run off of pesticides used to kill non-native species, pollution Red Eared Frog habitat on Sharp Park Property by pesticide and soil run off, infill of Laguna Salada on Sharp Park by soil run off, etc. In some instances the negative effects are referred to as “Non-significant”.

No healthy trees should be removed from public lands. Recreation areas for people and people with dogs should be increased. [Garber-1-01]

- The essential environmental issue related to the proposed Natural Areas Program Management Plan is still the same one that many of us have spoken about at public hearings for the last decade: the planned destruction of thousands of mature trees. The plan is based on nativenaive species preference related to habitat values (always ignoring the scientific studies on habitat value of non-native trees), with seemingly no acknowledgement of the vital role that mature trees play in many other aspects of the environment from air quality, storm water reduction, and carbon sequestration, wind and dust/particulate reduction. [Wade-1-01]

Response BI-30

The comments indicate opposition to the removal of nonnative trees (particularly healthy trees) and vegetation within the Natural Areas (and specifically Sharp Park) and replacing them with native species and also questions the preference for native species over nonnative species. These comments question whether the Draft EIR analyzed the effects of tree removal on aesthetics, hydraulics, storm water reduction/runoff, carbon sequestration, air quality, dust/particulate reduction, biological resources (including impacts to the California red-legged frog), wind and shadow, and recreation.

Reason for and Scope of Removal of Nonnative Trees

Across the Natural Areas, over 84 percent of the existing nonnative trees would remain, and the trees proposed for removal would be replaced at a roughly one-to-one ratio with native trees, although not necessarily in the same Natural Area. Draft EIR Table 5 (provided on p. 114) indicates that of the 117,433 invasive trees located within the Natural Areas (including Sharp Park), 18,448 trees (or 16 percent) would be removed and 98,985 trees (or 84 percent) would remain. Of the 18,448 trees that would be removed, 15,000 trees would be removed in Sharp Park and 3,448 trees would be removed in the San Francisco Natural Areas; therefore, under the SNRAMP, nonnative trees and brush would not be removed in the majority of open spaces in the city. Also, restoration would be accomplished in both unforested areas, as well as areas where nonnative, invasive species have been removed. As stated on SNRAMP p. 1-3, one of the objectives of the Plan is to promote the

functioning of San Francisco's native ecosystem, including the maintenance of native biodiversity, which requires the removal of invasive species.

With respect to the removal of trees in Sharp Park, and as presented in Table 5 on Draft EIR p. 114, approximately 15,000 of the 54,000 existing eucalyptus trees would be removed from select areas during the 20-year lifetime of the SNRAMP to restore native scrub habitats. Thus, trees would be removed in the Natural Areas over a 20-year period of time, and not all at one time.

Approximately 15,000 of an overall 54,000 nonnative trees within the Sharp Park Natural Area would be removed; however, some scattered, large individuals would remain in order to minimize large-scale disturbance and disruption to wildlife and to promote a gradual conversion to native scrub habitats.

Summary of Draft EIR Analysis of Removal of Nonnative Trees

Aesthetics, wind and shadow, recreation /greenhouse gases, biological resources (including impacts to the California red-legged frog), hydrology and stormwater/erosion, and air quality (including dust/particulate reduction) impacts resulting from implementation of the proposed project, including both construction and operational phases, were addressed in the Draft EIR in Sections V.C, V.E, V.F, V.G, V.H, and V.K, respectively. While the Draft EIR did conclude that there would be significant and unavoidable impacts related to air quality on a project-specific basis and recreation, biological resources, and air quality on a cumulative basis, even with the implementation of feasible mitigation measures, there were no significant and unavoidable impacts related to the other topics, including aesthetics, wind and shadow, greenhouse gases, and hydrology and stormwater/erosion; those impacts were determined to be less-than-significant or could be reduced to a less-than-significant level after implementation of the identified mitigation measures.

Refer also to Response BI-13, RTC p. 4-397 for a discussion of biological impacts related to tree removal; Response BI-16, RTC p. 4-405, for a discussion of the California red-legged frog in Laguna Salada (Sharp Park); Response PD-11, RTC p. 4-159, for a discussion on how the SNRAMP project would increase biodiversity; Response BI-24, RTC p. 4-420, for a discussion of how invasive species are capable of spreading rapidly, thereby displacing native plants; Response AE-1, RTC p. 4-219, for a discussion of the aesthetic impacts of tree removal; Response AQ-1, RTC p. 4-283, for a discussion of increased pollution from tree removal vehicles; Response GG-1, RTC p. 4-297, for a discussion of GHG emissions and the associated carbon sequestration impacts; Response WS-1, RTC p. 4-309, and Response WS-2, RTC p. 4-310, for a discussion of wind impacts from tree removal; Response PD-5, RTC p. 4-141, for a discussion of native plant restoration efforts as opposed to the provision of additional recreational areas; Response RE-8, RTC p. 4-324, for a discussion of the impacts resulting from restrictions on recreational access; Response HY-1, RTC p. 4-486, for a discussion of drainage issues and downstream flooding from tree removal activities; and Response HZ-1, RTC p. 4-531, for a discussion of the use of pesticides by the Natural Areas Program.

In summary, the Draft EIR analyzes the effects of tree removal proposed by the SNRAMP on all applicable resource topics, makes a significance conclusion regarding the nature and magnitude of the impact, and includes mitigation measures to reduce or eliminate significant impacts, as required under CEQA. Further, this Responses to Comments document provides a good faith, reasoned response to all environmental issues raised by the commenters, which further clarifies the information and analysis provided in the Draft EIR.

<p>Comment BI-31 Native vegetation planting impacts on ecosystems and landscapes</p>

The response to Comment BI-31 addresses all or part of the following individual comment:

PH-Bowman-01

- San Francisco has already taken extreme position of excluding all people from the San Francisco watershed. The 26,000 acres there is surrounded by a seven foot chain link fence, and this plan ignores that this has been already allocated to natural areas. The San Francisco park sites are only ten percent or tenth of the size of that single refuge, and this extreme plan takes 40 percent of that little space for more native plant projects. For me, the gardening projects will provide little benefit and will destroy the new ecosystems that have been developed over the past 400 years and will destroy this treasured San Francisco landscape that is part of our diverse culture, history, and future. [PH-Bowman-01]

Response BI-31

This comment expresses opposition to the conversion of nonnative species within the Natural Areas to native species because the San Francisco watershed is not accessible to the public. The commenter also indicates that the SFRPD plans to “take 40 percent” of park sites for native plant projects.

The Peninsula Watershed is under the jurisdiction of the SFPUC. With respect to the commenter’s concern about the exclusion of people from the San Francisco watershed, as stated on page II-5 of the Peninsula Watershed Management Plan Final EIR,¹³⁸ which was prepared with the SFPUC as the Lead Agency, “The 23,000-acre Peninsula Watershed is located in central San Mateo County, south of the City and County of San Francisco (see Figure II-2).” Another clear, visual representation of the Peninsula Watershed vis-à-vis the SNRAMP is provided by Map 1 of the Final General Management Plan for Golden Gate National Recreation Area and Muir Woods National Monument.¹³⁹ Therefore, the Peninsula Watershed is not under the SFRPD’s jurisdiction and is geographically distinct from

¹³⁸ San Francisco Planning Department, *Peninsula Watershed Management Plan Final EIR*, January 11, 2001. This document is available online at:
http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0ahUKEwj964q615bNAhVB72MKHfOVbWAQFggjMAE&url=http%3A%2F%2Fwww.sfwater.org%2FModules%2FShowDocument.aspx%3FdocumentID%3D4343&usg=AFQjCNHXNWE1njd8IVA_Aco2aVe0H0E3MA&sig2=GnYLIWj15NBdVoT3udm66Q&bvm=bv.124088155,d.cGc, accessed on June 7, 2016.

¹³⁹ <http://parkplanning.nps.gov/document.cfm?parkID=303&projectID=15075&documentID=58777>, accessed on November 2, 2015.

the SFRPD's Natural Areas. Further, any decisions regarding the use of exclusionary barriers (such as fencing) within the Peninsula Watershed lands is within the purview of the SFPUC, and not the SFRPD. While the service area for the 23,000-acre Peninsula Watershed (not 26,000 acres, as mentioned by the commenter) includes 2.4 million customers in San Francisco and in portions of San Mateo, Santa Clara, and Alameda Counties, the geographic extent of the watershed (as illustrated by Figure II-3 of the Peninsula Watershed Management Plan Final EIR) does not include any of the Natural Areas that are the subject of this EIR.

The SNRAMP does not propose to "take" 40 percent of the land for Natural Areas, but instead seeks to improve the existing Natural Areas through habitat restoration and management activities and the closure and improvement of the trail systems to allow recreational access that supports habitat restoration; in fact, while the habitats and uses within the Natural Areas will change under the Proposed Project, the total acreage of the Natural Areas will remain approximately the same (refer to Table 5, Draft EIR p. 114), with the exception of Sharp Park due to changes to the park boundaries following the Laguna Salada Restoration project.

Comment BI-32	Effects on nesting birds
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The response to Comment BI-32 addresses all or part of the following individual comments:

GGAS-1-07

GGAS-1-12

GGAS-1-17

Bartley-1-03

- Golden Gate Audubon supports the tree removal proposed in this plan when the tree trimmers and tree removal is made after taking precautions defined above to protect native, nesting bird species. (See DEIR, at 92) Where trees must be removed during the bird nesting season (February 1 – August 1 of each year), surveys should be conducted to avoid unnecessarily disturbing nesting birds. Destruction of birds' nests, eggs, or young constitutes a violation of the federal Migratory Bird Treaty Act, for which there are no take permits allowed. [GGAS-1-07]
- Golden Gate Audubon endorses the text included in the Breeding Bird Habitat portion of Section III.H. (DEIR, at 109). However, we recommend that the text be amended to include consideration of nest predators other than the nest-parasite Brown Headed Cowbirds. For example, the number of crows in San Francisco has been increasing in recent years, likely due in part to poor trash management. Therefore, Golden Gate Audubon recommends the following text:
 - > If surveys indicate that predation by crows, European Starlings, English House Sparrows, or other bird species are subsidized by human activities is a significant problem, consult with CDFG and the USFWS to determine the proper course of action, if any, to address population increases of these species and to minimize effects of these species on native, local breeding birds. [GGAS-1-12]
- Golden Gate Audubon endorses the section of the DEIR relating to Urban Forests practices. (DEIR, at 111). We recommend that the section include text that all urban forest practices will

consider impacts to nesting birds during the bird breeding season or where particular trees have been known to be important nesting or roosting sites in prior nesting seasons. [GGAS-1-17]

- With the exception of public safety issues tree removal and maintenance should always occur between nesting seasons. Native birds begin nesting as early as January and extend through July for the many species that breed in San Francisco. A moratorium on significant arborist work should begin by mid-February and extend through mid-July. Through our studies we have found that trained biologist nest monitors will miss bird nests on their surveys. City arborists should work with local avian biologists, many who are already performing nest monitoring, to ensure the highest levels of safety for citizens and wildlife. [Bartley-1-03]

Response BI-32

These comments express concern about nest predators other than the nest-parasite brown-headed cowbirds and, unless public safety is a consideration, that tree removal and maintenance occur between nesting seasons. Another commenter endorsed the section of the Draft EIR relating to urban forest practices, but suggested text stating that all urban forest practices will consider impacts to nesting birds during the bird breeding season or where particular trees have been known to be important nesting or roosting sites in prior nesting seasons.

Urban forest practices and breeding bird concerns are addressed by proposed General Recommendation GR-4b, which applies to all vegetation management, including activities within the urban forests. As stated in GR-4b, vegetation management activities would typically be conducted outside the breeding season of February 1 to August 31. The text on Draft EIR p. 109 (fourth bullet) has been changed, as follows:

GR-4c – If surveys indicate that parasitism by brown-headed cowbirds or predation by crows, European starlings, English house sparrows, or other bird species subsidized by human activities is a significant problem, consult with the CDFG and the USFWS to determine the proper protocols course of action, if any, to address population increases of these species and to minimize the ~~negative~~ effects of ~~this~~ these species on local breeding birds.

Refer also to Response PD-19, RTC p. 4-189, for a discussion of trash management activities.

Comment BI-33 SNRAMP proposals for tree replacement

The response to Comment BI-33 addresses all or part of the following individual comments:

SFFA-3-01	SF Tree-1-01	SF Tree-1-02
Tank Hill Neighbors-1-01	Tank Hill Neighbors-1-02	Bachmanov-1-01
Bose-1-10	Bowman-2-02	Bowman-2-07
Gomez-1-06	Hecht-1-01	Lapins-1-01
Lapins-1-02	McAllister-2-03	McAllister-3-01
McAllister-3-02	Rotter-E-1-02	Rotter-E-1-03

■ **1. Trees destroyed by implementation of SNRAMP cannot/will not be replaced**

The DEIR claims that all trees removed in San Francisco will be replaced “one-to-one” by trees that are native to San Francisco. The SNRAMP supports this fictional premise by falsely reducing the number of trees that will be removed:

- > By not counting trees less than 15 feet tall which it intends to destroy, despite the fact that the US Forest Service survey of San Francisco’s urban forest reports that the trunks of most (51.4%) trees in San Francisco are less than 6 inches in diameter at breast height, the functional equivalent of trees less than 15 feet tall. (Nowak 2007)
- > By not counting the hundreds of healthy trees that have already been destroyed by the Natural Areas Program in “natural areas” at Tank Hill, Pine Lake, Lake Merced, Bayview Hill, Glen Canyon parks, etc., prior to the approval of SNRAMP. (see pages 5-8 for details)

However, even artificially reducing the number of trees removed by the implementation of SNRAMP does not make “one-to-one” replacement a realistic goal.

The natural history of trees in San Francisco

The primary reason why we know that it will not be possible to grow native trees in the natural areas in San Francisco is that there were few native trees in San Francisco before non-native trees were planted by European settlers in the late 19th century. San Francisco’s “Urban Forest Plan” which was officially adopted by the Urban Forestry Council in 2006 and approved by the Board of Supervisors, describes the origins of San Francisco’s urban forest as follows:

“No forest existed prior to the European settlement of the city and the photographs and written records from that time illustrate a lack of trees ... Towards the Pacific Ocean, one saw vast dunes of sand, moving under the constant wind. While there were oaks and willows along creeks, San Francisco’s urban forest had little or nothing in the way of native tree resources. The City’s urban forest arose from a brief but intense period of afforestation, which created forests on sand without tree cover.”

The horticultural reality of trees native to San Francisco

More importantly, the reality is that even if we want to plant more native trees in San Francisco, they will not grow in most places in San Francisco because they do not tolerate San Francisco’s climate and growing conditions: wind, fog, and sandy or rocky soil, etc. We know that for several reasons:

- > There are few native trees in San Francisco now. According to the US Forest Service survey of San Francisco’s urban forest only two species of tree native to San Francisco were found in sufficient numbers to be counted in the 194 plots they surveyed: Coast live oak was reported as .1% (one-tenth of one percent) and California bay laurel 2.1% of the total tree population of 669,000 trees. (Nowak 2007)

- > The City of San Francisco maintains an official list of recommended species of trees for use by the Friends of the Urban Forest and the Department of Public Works. (CCSF Resolution No. 003-11-UFC)
 - The most recent list (2011) categorizes 27 species of trees as “Species that perform well in many locations in San Francisco.” There is not a single native tree in that category.
 - Thirty-six tree species are categorized as “Species that perform well in certain locations with special considerations as noted.” Only one of these 36 species is native to San Francisco, the Coast live oak and its “special considerations” are described as “uneven performer, prefers heat, wind protection, good drainage.”
 - The third category is “Species that need further evaluation.” Only one (Holly leaf cherry) of the 22 species in that category is native to San Francisco.
- > Finally, about 25 native trees were planted on Tank Hill to placate neighbors who objected to the removal of the trees by the Natural Areas Program (NAP). About 10 years later only 5 have survived and only one shows any growth.

SNRAMP documents that there is no intention to plant “replacement” trees

In fact, the SNRAMP documents that the Natural Areas Program (NAP) does not intend to plant replacement trees for the thousands of trees it proposes to destroy.

- > The majority of trees over 15 feet tall designated for removal by SNRAMP (15,000 trees) are in Sharp Park. The DEIR acknowledges that these trees will not be replaced because this area will be converted to native coastal scrub.
- > The DEIR makes no commitment to replace the trees less than 15 feet tall that will be removed but are not quantified by SNRAMP because they are not defined by SNRAMP as trees. There are probably thousands of trees less than 15 feet tall in the “natural areas” that will be removed and not replaced.
- > Because most of the natural areas are rock outcrops and sand hills that were treeless prior to the arrival of Europeans, there is little acreage within the “natural areas” that is capable of supporting trees that are native to San Francisco: “Two native forest series ... comprise approximately 17 acres, 2 percent of total vegetation [in the natural areas]” (SNRAMP, Setting, page 3-11). Obviously, it would not be physically possible to plant thousands of native trees in the small areas in which they would be able to survive.
- > SNRAMP documents the intention to convert all MA-1 and MA-2 areas, comprising 58% of the total acres of “natural areas” to grassland and scrub: “Within MA-1 and MA-2, these sites [of tree removals] would then be replanted with native shrub and grassland species.” (SNRAMP, Forestry Statement, page F-3)
- > Only MA-3 areas, comprising 42% of total acreage will continue to support the urban forest: “Within MA-3, urban forest species would be planted or encouraged (see Section 5, GR-15)” (SNRAMP, Forestry Statement, page F-3). However, the Forestry Statement also documents the intention to thin the urban forest in MA-3 areas to a basal

area of 60-200 trees per acre (our estimate based on the formula for basal area in SNRAMP). That represents a significant thinning of the urban forest when compared to the tree density of the eucalyptus forest on Mount Sutro documented by UCSF as 740 trees per acre.

- > The “Urban Forestry Statements” in Appendix F of the management plan contain the long-term plans for the natural areas in which trees will be destroyed. All but one of these specific plans is some variation of “conversion of some areas of forest to scrub and grasslands.” The exception is Corona Heights for which the plans are “converted gradually to oak woodland.” The Corona Heights natural area is 2.4 acres, making it physically impossible to plant thousands of oaks in that location.
- > “Oak woodland” is the only vegetation goal in SNRAMP which foresees the planting of native trees. Yet, the DEIR says nothing about the potential for Sudden Oak Death (SOD) to decimate the oak population in the San Francisco Bay Area. Ironically, the DEIR acknowledges that one of the comments on the Initial Study raised this question. Yet, despite that question, the DEIR remains silent about the potential for oaks to be killed by SOD. Since the publication of the Initial Study, our local expert (Matteo Garbelotto, UC Berkeley) has reported the rampant spread of SOD and its deadly consequences: “... experts predict as many as 90% of California live oaks and black oaks could die from the disease within 25 years.”¹

2. The trees that have been designated for removal are NOT dead, dying, or hazardous

We have many reasons to challenge the truth of the claim in the DEIR that only dead, dying, hazardous or unhealthy trees will be removed by the implementation of SNRAMP:

- > SNRAMP documents that young, non-native trees less than 15 feet tall will be removed from the “natural areas.” By definition these young trees are not dead or unhealthy because they are young and actively growing.
- > SNRAMP did not designate only dead, dying, hazardous trees for removal. Trees have been selected for removal only in so far as they support the goal of expanding and enhancing areas of native plants, especially grasslands and scrub.
- > The predominant non-native tree in San Francisco, blue gum eucalyptus lives in Australia from 200-400 years, depending upon the climate. (Jacobs 1955, page 67) In milder climates, such as San Francisco, the blue gum lives toward the longer end of this range. The trees over 15 feet tall that have been designated for removal are almost exclusively blue gum.
- > However, there are many natural predators in Australia that were not imported to California. It is possible that the eucalypts will live longer here: “Once established elsewhere, some species of eucalypts are capable of adjusting to a broader range of soil, water, and slope conditions than in Australia ... once released from interspecific competitions and from native insect fauna ... ” (Doughty 2000, page 6)

- > The San Francisco Presidio's Vegetation Management Plan reports that eucalypts in the Presidio are about 100 years old and they are expected to live much longer: "blue gum eucalyptus can continue to live much longer ..." (Vegetation Management Plan, page 28)
- > The Hort Science "Assessment of Urban Forestry Operations" for the Recreation and Park Department states that, "the life-span of the blue gum, the most common eucalyptus species, is unknown." In other words, although they have lived in San Francisco more than 100 years, they have not lived in San Francisco long enough to know how long they will live here.
- > The Natural Areas Program has already destroyed hundreds of non-native trees in the past 15 years. We can see with our own eyes that these trees were not unhealthy when they were destroyed.
- > The claim that only unhealthy and/or hazardous trees will be destroyed in the natural areas is contradicted by the "Assessment of Urban Forestry Operations" of the Recreation and Park Department, July 2010.
- > Neither written plans nor EIRs are required to remove hazardous trees. The City has the right and an obligation to remove hazardous trees when they are identified as such by qualified arborists.

Trees have been designated for destruction solely to benefit native plants

The DEIR claims that only dead, dying, hazardous trees will be removed from the natural areas. This claim is contradicted by the SNRAMP that the DEIR is supposedly evaluating. Not a single explanation in the SNRAMP of why trees have been selected for removal is based on the health of the trees.

- > Lake Merced: The explanation for removing 134 trees is "To maintain and enhance native habitats, it is necessary to selectively remove some trees."
- > Mt. Davidson: The explanation for removing 1,600 trees is: "In order to enhance the sensitive species habitat that persists in the urban forest understory and at the forest-grassland ecotone, invasive blue gum eucalyptus trees will be removed in select areas. Coastal scrub and reed grass communities require additional light to reach the forest floor in order to persist"
- > Glen Canyon: The explanations for removing 120 trees are: "to help protect and preserve the native grassland" and "to increase light penetration to the forest floor"
- > Bayview Hill: The explanation for removing 505 trees is: "In order to enhance the sensitive species habitat that persists in the urban forest understory and at the forest-grassland ecotone, invasive blue gum eucalyptus trees will be removed in select areas."
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- > Interior Greenbelt: The explanation for removing 140 trees is: "In order to enhance the seasonal creek and sensitive species habitat that persists in the urban forest understory, invasive blue gum eucalyptus trees will be removed in select areas."
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In not a single case does the management plan for the Natural Areas Program corroborate the claim made in the DEIR that only dead, dying, diseased, or hazardous trees will be removed. In every case, the explanation for the removal of eucalypts is that their removal will benefit native plants, specifically grassland and scrub. In other words, the explanation provided by the DEIR for tree removals in the natural areas is a misrepresentation of the SNRAMP which it is supposedly evaluating.

The trees that have already been destroyed in the "natural areas" were NOT dead, dying, or diseased.

Although it's interesting and instructive to turn to the written word in SNRAMP for the Natural Areas Program to prove that the DEIR is based on fictional premises, the strongest evidence is the track record of tree removals in the past 15 years. The trees that have been destroyed in the "natural areas" in the past 15 years were NOT dead, dying, or diseased.

Hundreds of trees have been removed in the natural areas since the Natural Areas Program began 15 years ago. We'll visit a few of those areas with photographs of those destroyed trees to prove that healthy, young non-native trees have been destroyed. This track record predicts the future: more healthy young trees will be destroyed in the future for the same reason that healthy young trees were destroyed in the past, i.e., because their mere existence is perceived as being a barrier to the restoration of native grassland and scrub.

- > The first tree destruction by the Natural Areas Program and/or its supporters took the form of girdling about 1,000 healthy trees in the natural areas about 10 to 15 years ago. Girdling a tree prevents water and nutrients from traveling from the roots of the tree to its canopy. The tree dies slowly over time. The larger the tree, the longer it takes to die. None of these trees were dead when they were girdled. There is no point in girdling a dead tree.
- > Many trees that were more easily cut down without heavy equipment were simply destroyed, sometimes leaving ugly stumps several feet off the ground.
- > About 25 young trees were destroyed on Tank Hill about 10 years ago. We can see from those that remain that the trees-which were planted around the same time-were young. They don't look particularly healthy in the picture because they were severely limbed up to bring more light to the native plant garden for which the neighboring trees were destroyed. All of the trees would have been destroyed if the neighbors had not come to their defense. About 25 oaks were provided to the neighbors by NAP to plant as "replacement" trees. Only 5 are still alive. Only one has grown. The remainder are about 36" tall and their trunks about 1" in diameter, as when they were planted.

- > About 25 young trees were destroyed at the west end of Pine Lake to create a native plant garden that is now a barren, weedy mess surrounded by the stumps of the young trees that were destroyed. These trees were destroyed after all the trees in Stern Grove/Pine Lake had been evaluated by Hort Science. The trees that were cut down to create this new native plant garden had not been judged to be hazardous. They were cut solely for the purpose of expanding the native plant garden.
- > About 25 trees of medium size were destroyed at the southern end of Islais Creek in Glen Canyon Park about 6 years ago in order to create a native plant garden. They were replaced with shrubs.
- > Many young trees were recently destroyed in the "natural area" called the Interior Greenbelt. These trees were destroyed in connection with the development of a trail, which has recently become the means by which the Natural Areas Program has funded tree removals with capital funding.
- > In 2008, the Public Utilities Commission completed a seismic upgrade to the water tank on Mt. Davidson. Because the existing pipe to the tank from the reservoir was "located under sensitive habitat areas" according to the PUC announcement of the project, the pipe was relocated at the insistence of the Natural Areas Program and its supporters. The relocation of the pipe through the non-native forest required the destruction of approximately 100 healthy, mature trees and substantially increased the cost of the project. Only five replacement trees were planted.

There was nothing wrong with any of these trees before they were destroyed. Their only crime was that they were not native to San Francisco. There are probably many other trees that were destroyed in the natural areas in the past 15 years. We are reporting only those removals of which we have personal knowledge.

The claim that only unhealthy and/or hazardous trees will be destroyed in the natural areas is contradicted by the "Assessment of Urban Forestry Operations" of the Recreation and Park Department.

The "Assessment of Urban Forestry Operations"² of the Recreation and Park Department was conducted by the professional arborists of Hort Science and published in July 2010. It states that:

- > No risk assessments of trees in parks, squares, and golf courses for health and safety hazards had been conducted in San Francisco with the exception of Stern Grove and Park Presidio Blvd at the time the report was published. The hazards identified in those two assessments had been only partially mitigated by the time the report was published.
- > All tree maintenance conducted in San Francisco's parks is reactive, i.e., done in response to specific requests for tree removals or pruning. There was a backlog of "some 450" such requests at the time the report was written.
- > The "Assessment" recommends that trees be evaluated in 18 parks considered "high priority." None of these 18 parks are natural areas. In the few parks that contain natural areas, only the "park perimeter streets" will be evaluated.

- > There is no reforestation in San Francisco's parks, squares and golf courses outside of Golden Gate Park. The number of trees removed in parks and squares exceeds the number of trees planted. The ratio of removals to plantings is significantly higher in golf courses, particularly Sharp Park.

These observations by certified arborists and written in consultation with the Recreation and Park Department contradicts these claims in the DEIR for the Natural Areas Program:

- > **The trees in the natural areas had not been evaluated for health or safety when they were designated for removal by SNRAMP in 2006. Therefore, the DEIR cannot claim that the trees designated for removal in the natural areas are unhealthy and/or hazardous.**
- > **There is no reforestation effort outside of Golden Gate Park. Therefore, the DEIR cannot claim that all trees removed in the natural areas will be replaced.**

Conclusion

The final EIR must correct the following errors of FACT in the DEIR:

- > The final EIR cannot claim that all non-native trees that will be destroyed will be replaced with an equal number of native trees because that is neither consistent with the SNRAMP, nor is it physically possible.
- > The final EIR cannot claim that all non-native trees that will be destroyed are dead, dying, diseased, or hazardous because they are NOT and the claim contradicts the SNRAMP.
- > The final EIR must evaluate the risk of failure of the trees that remain after removal of thousands of trees [SFFA-3-01]
- The DEIR claims that every non-native tree that will be destroyed by the Natural Areas Program will be replaced “one-for-one” by a native tree somewhere within the natural areas. This is quite simply not true because:
 - > There were few native trees in San Francisco prior to its settlement because native trees are not adapted to San Francisco’s climate and soil conditions.
 - > Native trees were not grow in most of the natural areas because of the microclimate in those locations.
 - > The Natural Areas Program has already destroyed hundreds of trees few of which were replaced by native trees. In the few instances in which native trees were planted by the Natural Areas Program, they rarely survived.
 - > The stated goal of the Natural Areas Program is to return San Francisco to grassland and scrub, which is the native habitat, with the exception of a few small patches of oak woodland in protected areas with sufficient water drainage to keep them alive. [SF Tree-1-01]

- The DEIR claims that only dead, dying, hazardous trees will be removed. This claim is also not true because:
 - > None of the hundreds of trees that have already been destroyed by the Natural Areas Program were dead, dying, hazardous trees.
 - > Most of the trees that will be destroyed by the Natural Areas Program are Blue Gum eucalyptus. The Blue Gum eucalypts of San Francisco are young and healthy. Based on their lifespan in Australia, they should continue to be healthy in San Francisco for about 200 more years. [SF Tree-1-02]
- The DEIR claims that only dead, dying, diseased, trees will be destroyed by the implementation of the management plan (SNRAMP). This claim is not consistent with our experience with the actions of NAP or with the written management plan. [Tank Hill Neighbors-1-01] [Lapins-1-01]
- The DEIR claims that every tree that is destroyed will be replaced with a native tree. We do not believe, based on our experience, that it will be physically possible to replace every tree with a native tree because native trees will not grow in most places in San Francisco. Our experience with “replacement trees,” makes us question that NAP has the resources to implement such a commitment, even if the native trees would grow. [Tank Hill Neighbors-1-02] [Lapins-1-02]
- The right plan to plant the trees, wait 15-20 years and after you can cut same amount the trees as you planted. [Bachmanov-1-01]
- Pg 92: The DEIR notes that the trees removed would be replaced one-for-one. This is impossible on several counts:
 - (a) The SNRAMP does not have any plan for tree-planting, only for conversion to grass and shrubland.
 - (b) Given that a tree is defined as greater than 15 feet in height, the trees that will be planted would actually be seedlings or saplings by the definitions used in this report. Since the SNRAMP plans to remove an uncounted number of seedlings and saplings in addition to the 18,500 trees over 15 feet in height replacement is clearly not feasible.
 - (c) The majority of the trees would be removed in Sharp Park, where windthrow is acknowledged to be a factor. This implies that the actual trees lost would exceed the 18,500 number, and replacing them is essentially impossible. [Bose-1-10]
- 2. Add a summary of urban forest acres to be converted long term to coastal scrub and grassland

1.2 Add a summary of urban forest acres to be converted long term to coastal dunes, scrub, and grassland in Table 5: Summary of Natural Areas Management Plan

Rec & Park and city officials have routinely attempted to marginalize the publics’ opposition to the SNRAMP by stating in the media and at public presentations that only 5% of trees will be removed and that trees will be replaced one-for-one. This deceptive information

regarding the SNRAMP undermines the public and official's understanding of the proposed plans and current management practices and their ability to comment fully on this significant issues related to the plan; therefore, the DEIR needs to clarify this controversial issue in the executive summary to ensure reviewers of the DEIR are not misled by the omission of significant information.

Specially, the revised DEIR needs to provide the public with an additional summarized analysis of the total acres of urban forest that the SNRAMP states will be eliminated long-term and replaced with coastal scrub, dunes, and grassland. The public needs to be aware that the direct cutting of trees will only cause part of the significant environmental impact with equally significant impacts from:

- 1) Thinning the remaining MA-3 forest,
- 2) Removing all small trees in MA-1 and MA-2, thus stopping the natural regeneration of self-sustaining trees, until the conversion is complete,
- 3) Accelerating the windthrow and erosion attrition for the remaining trees, due to removing trees [Bowman-2-02]

■ **4. Clarify plans for reforestation and types of trees used for reforestation**

Any reforestation plans or the lack of a reforestation plans should also be stated with an analysis of the likelihood of success, since the NAP has had limited success with establishing native trees with past projects (e.g., Tank Hill, Mt Davidson). I have observed successful oak plantings at Golden Gate Heights and two McLaren locations but all three sites have been in areas sheltered from wind by surrounding urban forests and are park areas outside the Natural Areas.

Difficulties with establishing oaks is likely indicative of the environmental changes relating to global climate change, pollution related to densely populated city, the limited locations in the Natural Areas where native trees thrive in a windy and foggy environment, and that the Westside Natural Areas are naturally sand dunes.

- The public should also be made aware in the summary about the type of trees expected to be planted, since shrubs that may grow into small trees do not have the same aesthetic quality as the majestic, large trees currently in the urban forests nor do shrubs that may grow into small trees have the same environmental impacts (e.g., air pollution absorption, carbon sequestration, etc.) as large trees. Note that per Rec & Park records provided from a Sunshine request, the only trees planted in the Natural Areas during the past three years except for 74 oaks where really shrubs. Below in Table A is a summary of the trees planted by location and Table B is the actual list of NAP Tree Planting 2009 to 2012 that was provided by RPD based on a Sunshine Act Request. [Bowman-2-07]
- Listen to what San Franciscans want. We fight deforestation in Brazil, do we want it to happen right here at home? We don't think so. Limit tree removal to diseased and hazardous trees. [Gomez-1-06]

- For the past decade my business, Second Nature Design, has been dedicated to sustainable landscape design. My emphasis is habitat restoration and rehabilitation, one urban garden at a time. During my longtime work with Friends of the Urban Forest I helped establish the Ongoing Tree Care Program, organizing and participating in the hands-on care of many of our tens of thousands of street trees throughout the San Francisco area. I am a huge proponent of native plants, particularly trees. However, destroying our existing mature Urban Forest whether in our parklands or on the streets under the rubric “restoration ecology” is absurd. [Hecht-1-01]
- > Bayview Hill: The explanation for removing 505 trees is: “In order to enhance the sensitive species habitat that persists in the urban forest understory and at the forest-grassland ecotone, invasive blue gum eucalyptus trees will be removed in select areas.”
- > McLaren: The explanation for removing 805 trees is: “In order to enhance the sensitive species habitat that persists in the urban forest understory and at the forest-scrub-grassland ecotone, invasive trees will be removed in select areas. Coastal scrub and grassland communities require additional light to reach the forest floor in order to persist.”
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Hundreds of trees have been removed in the natural areas since the Natural Areas Program began 15 years ago. We'll visit a few of those areas with photographs of those destroyed trees to prove that healthy, young non-native trees have been destroyed. This track record predicts the future: more healthy young trees will be destroyed in the future for the same reason that healthy young trees were destroyed in the past, i.e., because their mere existence is perceived as being a barrier to the restoration of native grassland and scrub. [McAllister-2-03]

■ **1. Trees destroyed by implementation of SNRAMP cannot/will not be replaced.**

The DEIR claims that all trees removed in San Francisco will be replaced “one-to-one” by trees that are native to San Francisco. The SNRAMP supports this fictional premise by falsely reducing the number of trees that will be removed:

- > By not counting trees less than 15 feet tall which it intends to destroy, despite the fact that the US Forest Service survey of San Francisco’s urban forest reports that the trunks of most (51.4%) trees in San Francisco are less than 6 inches in diameter at breast height, the functional equivalent of trees less than 15 feet tall. (Nowak 2007)
- > By not counting the hundreds of healthy trees that have already been destroyed by the Natural Areas Program in “natural areas” at Tank Hill, Pine Lake, Lake Merced, Bayview Hill, Glen Canyon parks, etc., prior to the approval of SNRAMP. (see pages 5-8 for details)

However, even artificially reducing the number of trees removed by the implementation of SNRAMP does not make “one-to-one” replacement a realistic goal.

The natural history of trees in San Francisco

The primary reason why we know that it will not be possible to grow native trees in the natural areas in San Francisco is that there were few native trees in San Francisco before non-native trees were planted by European settlers in the late 19th century. San Francisco’s “Urban Forest Plan” which was officially adopted by the Urban Forestry Council in 2006 and approved by the Board of Supervisors, describes the origins of San Francisco’s urban forest as follows:

“No forest existed prior to the European settlement of the city and the photographs and written records from that time illustrate a lack of trees ... Towards the Pacific Ocean, one saw vast dunes of sand, moving under the constant wind. While there were oaks and willows along creeks, San Francisco’s urban forest had little or nothing in the way of native tree resources. The City’s urban forest arose from a brief but intense period of afforestation, which created forests on sand without tree cover.”

The horticultural reality of trees native to San Francisco

More importantly, the reality is that even if we want to plant more native trees in San Francisco, they will not grow in most places in San Francisco because they do not tolerate San Francisco’s climate and growing conditions: wind, fog, and sandy or rocky soil, etc. We know that for several reasons:

- > There are few native trees in San Francisco now. According to the US Forest Service survey of San Francisco’s urban forest only two species of tree native to San Francisco were found in sufficient numbers to be counted in the 194 plots they surveyed: Coast live oak was reported as .1% (one-tenth of one percent) and California bay laurel 2.1% of the total tree population of 669,000 trees. (Nowak 2007)

- > The City of San Francisco maintains an official list of recommended species of trees for use by the Friends of the Urban Forest and the Department of Public Works. (CCSF Resolution No. 003-11-UFC)
 - The most recent list (2011) categorizes 27 species of trees as “Species that perform well in many locations in San Francisco.” There is not a single native tree in that category.
 - Thirty-six tree species are categorized as “Species that perform well in certain locations with special considerations as noted.” Only one of these 36 species is native to San Francisco, the Coast live oak and its “special considerations” are described as “uneven performer, prefers heat, wind protection, good drainage.”
 - The third category is “Species that need further evaluation.” Only one (Holly leaf cherry) of the 22 species in that category is native to San Francisco.
- > Finally, where native trees have been planted by the Natural Areas Program (NAP) to placate neighbors who objected to the removal of the trees in their neighborhood parks, the trees did not survive (see page 6 for details)

SNRAMP documents that there is no intention to plant “replacement” trees

In fact, the SNRAMP documents that the Natural Areas Program (NAP) does not intend to plant replacement trees for the thousands of trees it proposes to destroy.

- > The majority of trees over 15 feet tall designated for removal by SNRAMP (15,000 trees) are in Sharp Park. The DEIR acknowledges that these trees will not be replaced because this area will be converted to native coastal scrub.
- > The DEIR makes no commitment to replace the trees less than 15 feet tall that will be removed but are not quantified by SNRAMP because they are not defined by SNRAMP as trees. There are probably thousands of trees less than 15 feet tall in the “natural areas” that will be removed and not replaced.
- > Because most of the natural areas are rock outcrops and sand hills that were treeless prior to the arrival of Europeans, there is little acreage within the “natural areas” that is capable of supporting trees that are native to San Francisco: “Two native forest series ... comprise approximately 17 acres, 2 percent of total vegetation [in the natural areas]” (SNRAMP, Setting, page 3-11). Obviously, it would not be physically possible to plant thousands of native trees in the small areas in which they would be able to survive.
- > SNRAMP documents the intention to convert all MA-1 and MA-2 areas, comprising 58% of the total acres of “natural areas” to grassland and scrub: “Within MA-1 and MA-2, these sites [of tree removals] would then be replanted with native shrub and grassland species.” (SNRAMP, Forestry Statement, page F-3)
- > Only MA-3 areas, comprising 42% of total acreage will continue to support the urban forest: “Within MA-3, urban forest species would be planted or encouraged (see Section 5, GR-15)” (SNRAMP, Forestry Statement, page F-3). However, the Forestry Statement also documents the intention to thin the urban forest in MA-3 areas to a basal

area of 60-200 trees per acre (our estimate based on the formula for basal area in SNRAMP). That represents a significant thinning of the urban forest when compared to the tree density of the eucalyptus forest on Mount Sutro documented by UCSF as 740 trees per acre.

- > The “Urban Forestry Statements” in Appendix F of the management plan contain the long-term plans for the natural areas in which trees will be destroyed. All but one of these specific plans is some variation of “conversion of some areas of forest to scrub and grasslands.” The exception is Corona Heights for which the plans are “converted gradually to oak woodland.” The Corona Heights natural area is 2.4 acres, making it physically impossible to plant thousands of oaks in that location.
- > “Oak woodland” is the only vegetation goal in SNRAMP which foresees the planting of native trees. Yet, the DEIR says nothing about the potential for Sudden Oak Death (SOD) to decimate the oak population in the San Francisco Bay Area. Ironically, the DEIR acknowledges that one of the comments on the Initial Study raised this question. Yet, despite that question, the DEIR remains silent about the potential for oaks to be killed by SOD. Since the publication of the Initial Study, our local expert (Matteo Garbelotto, UC Berkeley) has reported the rampant spread of SOD and its deadly consequences: “... experts predict as many as 90% of California live oaks and black oaks could die from the disease within 25 years.”

Conclusion

The final EIR must correct the following errors of FACT in the DEIR:

- > The final EIR cannot claim that all non-native trees that will be destroyed will be replaced with an equal number of native trees because that is neither consistent with the SNRAMP, nor is it physically possible. [McAllister-3-01]
- **2. The trees that have been designated for removal are NOT dead, dying, or hazardous.**

We have many reasons to challenge the truth of the claim in the DEIR that only dead, dying, hazardous or unhealthy trees will be removed by the implementation of SNRAMP:

- > SNRAMP documents that young, non-native trees less than 15 feet tall will be removed from the “natural areas.” By definition these young trees are not dead or unhealthy because they are young and actively growing.
- > SNRAMP did not designate only dead, dying, hazardous trees for removal. Trees have been selected for removal only in so far as they support the goal of expanding and enhancing areas of native plants, especially grasslands and scrub.
- > The predominant non-native tree in San Francisco, blue gum eucalyptus lives in Australia from 200-400 years, depending upon the climate. (Jacobs 1955, page 67) In milder climates, such as San Francisco, the blue gum lives toward the longer end of this range. The trees over 15 feet tall that have been designated for removal are almost exclusively blue gum.

- > However, there are many natural predators in Australia that were not imported to California. It is possible that the eucalypts will live longer here: "Once established elsewhere, some species of eucalypts are capable of adjusting to a broader range of soil, water, and slope conditions than in Australia ... once released from inter-specific competitions and from native insect fauna ..." (Doughty 2000, page 6)
- > The San Francisco Presidio's Vegetation Management Plan reports that eucalypts in the Presidio are about 100 years old and they are expected to live much longer: "blue gum eucalyptus can continue to live much longer ..." (Vegetation Management Plan, page 28)
- > The Natural Areas Program has already destroyed hundreds of non-native trees in the past 15 years. We can see with our own eyes that these trees were not unhealthy when they were destroyed.
- > Neither written plans nor EIRs are required to remove hazardous trees. The City has the right and an obligation to remove hazardous trees when they are identified as such by qualified arborists.

Trees have been designated for destruction solely to benefit native plants

The DEIR claims that only dead, dying, hazardous trees will be removed from the natural areas. This claim is contradicted by the SNRAMP that the DEIR is supposedly evaluating. Not a single explanation in the SNRAMP of why trees have been selected for removal is based on the health of the trees.

- > Lake Merced: The explanation for removing 134 trees is "To maintain and enhance native habitats, it is necessary to selectively remove some trees."
- > Mt. Davidson: The explanation for removing 1,600 trees is: "In order to enhance the sensitive species habitat that persists in the urban forest understory and at the forest-grassland ecotone, invasive blue gum eucalyptus trees will be removed in select areas. Coastal scrub and reed grass communities require additional light to reach the forest floor in order to persist "
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- > The first tree destruction by the Natural Areas Program and/or its supporters took the form of girdling about 1,000 healthy trees in the natural areas about 10 to 15 years ago. Girdling a tree prevents water and nutrients from traveling from the roots of the tree to its canopy. The tree dies slowly over time. The larger the tree, the longer it takes to die. None of these trees were dead when they were girdled. There is no point in girdling a dead tree.
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- > Many young trees were recently destroyed in the “natural area” called the Interior Greenbelt. These trees were destroyed in connection with the development of a trail, which has recently become the means by which the Natural Areas Program has funded tree removals with capital funding.

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Conclusion

The final EIR must correct the following errors of FACT in the DEIR:

- > The final EIR cannot claim that all non-native trees that will be destroyed are dead, dying, diseased, or hazardous because they are NOT and the claim contradicts the SNRAMP. [McAllister-3-02]
- In the Interior Greenbelt many healthy, young trees were destroyed to develop a trail under the auspices of the Natural Areas Program. So claims that only dead, dying, diseased trees would be destroyed for implementation of the management plan are totally untrue. [Rotter-E-1-02]
- And we know that the claim that every destroyed tree will be replaced by a native tree is not possible because we’ve seen what happened on Tank Hill. [Rotter-E-1-03]

Response BI-33

These comments question the amount of trees that would be replaced when nonnative trees are removed; issues related to sudden oak death; whether the restoration and replacement efforts are likely to be successful; the size and location of trees to be replaced; whether all of the trees proposed for removal are dead, dying, or diseased, insect-infested, storm-damaged, or hazardous, or whose growth is suppressed by overcrowding; and aesthetic impacts related to the removal of trees. A summary of urban forest acres to be converted to other habitats is also requested, as well as a clarification of the plans for reforestation, including the types of trees proposed.

Removal of Trees (Including Aesthetic Impacts)

With respect to trees that would be removed, would remain, and/or would be replaced, Draft EIR Table 5 (provided on p. 114) indicates that of the 117,433 invasive trees located within the Natural Areas (including Sharp Park), 18,448 trees (or 16 percent) would be removed and 98,985 trees (or 84 percent) would remain, which consists of 15,000 trees that would be removed in Sharp Park and 3,448 trees that would be removed in the other San Francisco Natural Areas. As stated on SNRAMP p. 1-3, one of the objectives of the Plan is to identify and prioritize restoration and management

actions designed to promote the functioning of San Francisco's native ecosystem, including the maintenance of native biodiversity.

One of the commenters indicates that "the SNRAMP documents that the NAP does not intend to plant replacement trees for the thousands of trees it proposes to destroy." On the contrary, as stated in Draft EIR Chapter III, Project Description, p. 92, invasive trees that are removed in San Francisco would be replaced with native tree species at a ratio of roughly one-to-one, although not necessarily at the same location or within the same Natural Area. The provision of replacement trees is a component of the SNRAMP project, rather than a mitigation measure. Further, in a memorandum from Lisa Wayne, Open Space Manager, SFRPD, to Jessica Range, Environmental Planner, San Francisco Planning Department,¹⁴⁰ the SFRPD indicated that, each year, the NAP propagates and plants over 10,000 plants in restoration sites throughout the city, with at least 200 of those plants being trees. Therefore, SFRPD has demonstrated that planting replacement trees in Natural Areas at a one-to-one ratio, as proposed, is entirely feasible.

As also stated in SNRAMP Appendix F, p. F-7, at no one location will all the trees, or, for that matter, more than 15 percent of the existing trees be removed from Natural Areas within the city. The goal of the SNRAMP is to remove trees (whether larger or smaller) in a selective manner, limited to a prescribed number of acres or trees in compliance with the forestry statements (SNRAMP Appendix F), such that native species and sensitive habitats would flourish and diversity would increase.

In general, and as stated on SNRAMP p. 5-19, tree removal would be focused on dead or dying trees, trees with disease or insect infestations, storm-damaged or hazardous trees, and trees that are suppressed because of overcrowding. Nowhere does the SNRAMP or the DEIR state that tree removal would only remove dead, dying, or diseased trees, as indicated by commenters. Further, trees would typically be thinned over large areas or in small groups, which would result in the removal of smaller trees and saplings. Tree removal is discussed in detail in SNRAMP Appendix F and in Draft EIR pp. 92 and 93. Typically, trees would be removed limb-by-limb, rather than felling an entire tree; limb-by-limb removal techniques would always be applied in areas adjacent to other trees or sensitive habitat unless this technique is not feasible or practical from a safety perspective. Minimal-impact tree removal techniques would be employed and would involve removing the individual limbs of a tree, then cutting the trunk into individual sections. Tree removal would be conducted manually by someone climbing the tree or someone on a mechanical cherry picker next to the tree. If tree removal occurs in an area that is roadway accessible, the limbs and trunk sections typically would be transported from the area by a flatbed truck; in other areas, the limbs and trunk sections would be left in place on the ground. Tree removal would leave the tree stump and root ball

¹⁴⁰ Lisa Wayne, Open Space Manager, "Tree Removal and Replacement," memorandum to Jessica Range, Environmental Planner, San Francisco Planning Department, November 27, 2012.

intact to hold the soil and minimize subsurface disturbance; stumps may be ground to below grade where necessary to avoid tripping hazards. The SFRPD would spread tree removal across targeted portions of Natural Areas and would not concentrate it in a particular location. Larger-scale tree removal (that exceeds half an acre or, on average, more than 20 trees), identified and analyzed as long-term programmatic projects in this EIR, would remove trees within urban forests (MA-2 and MA-3) over time and not simultaneously in one portion of a Natural Area. The SFRPD's Tree Removal Procedures require that all trees designated for removal be posted at least 30 days before removal. While individuals and neighborhood organizations are not notified directly of the proposed removals, the posting includes a contact number for questions or concerns, which allows the public an opportunity to provide additional comment. Further, no trees are to be removed during this 30-day period. In addition, the Urban Forestry Ordinance has noticing requirements for the removal of street trees, significant trees, and landmark trees, which also prohibits the removal of trees during the noticing period unless the tree(s) could cause manifest danger, in which case the tree(s) could be removed immediately, with noticing occurring after the removal. As stated on Draft EIR p. 157, no landmark trees are proposed for removal under the SNRAMP.

Also, as stated in Draft EIR Chapter III, Project Description, p. 112, General Recommendation GR-15c, tree removal would focus on dead or dying trees, trees with disease or insect infestations, storm-damaged or hazardous trees, and trees that are suppressed because of overcrowding; however, there may be instances where other trees are removed in order to achieve broader restoration goals.

In terms of the size of trees, the diameter at breast height (dbh) is measured as the diameter of a tree at 4.5 feet above ground level on the uphill side of a tree. While a larger dbh is generally associated with taller trees, there is no specific, mathematical correlation between dbh and the height of a tree in general. For documentation purposes, the SNRAMP defines a tree as any plant having a dominant vertical trunk that is over 15 feet tall, while trees less than 15 feet tall are considered seedlings or saplings. The commenter is correct in that seedlings and saplings are not included in the calculation of the number of trees within the Natural Areas, trees to be removed, or basal area because they are not considered trees. SFRPD staff could remove trees that have a dbh of six inches or less (or a height of 15 feet or less); however, the SFRPD arborist would be consulted in the evaluation of the removal of larger trees. Further, the removal of saplings is addressed throughout the EIR as invasive vegetation removal or vegetation removal, which includes shrubs, saplings, and other species of less than 15 feet in height. Refer to Response PD-34, RTC p. 4-210, for a discussion of the methodology used for estimating trees in urban forests.

The commenter is also correct in citing Nowak 2007, which indicates that trees with diameters less than 6 inches account for 51.4 percent of the San Francisco tree population. According to this report, the three most common species in the urban forest are blue gum eucalyptus (15.9 percent), Monterey pine (8.4 percent), and Monterey cypress (3.8 percent), with the predominant species (eucalyptus) being nonnative, and the other two being native to California, but not San Francisco. The goal of the

SNRAMP is to remove trees (whether larger or smaller) in a selective manner, limited to a prescribed number of acres or trees in compliance with the forestry statements (SNRAMP Appendix F), such that native species and sensitive habitats would flourish and diversity would increase.

Draft EIR Chapter III, Project Description, p. 92, also states that the SFRPD would take into consideration the views from Natural Areas when locations are being selected for new trees; locations of replacement trees in San Francisco Natural Areas would be selected to preserve views from important points. Draft EIR p. 93 indicates that implementing the SNRAMP would involve thinning both individual trees and small clusters of trees. In most cases, some trees within the area would be left, and the surrounding forest would remain intact, as the commenter mentioned.

In terms of one of the commenter's concerns about "ugly stumps," as stated on Draft EIR p. 93 (in the Project Description chapter), tree removal would leave the tree stump and root ball intact to hold the soil and minimize subsurface disturbance. Impact AE-4, provided on Draft EIR pp. 191 through 195, address the potential aesthetic impacts caused by the removal of trees, concluding that impacts would be less than significant.

Sudden Oak Death

The SNRAMP envisions a plant palette that is diverse. It would not include planting a monoculture of any species, such as oak trees, that could be susceptible to sudden oak death. However, where oak trees are planted, SNRAMP Page 5-22 specifically addresses sudden oak death, stating that:

"One of the more recent diseases of concern has been sudden oak death, now found in most coastal California counties from Humboldt to Monterey, including San Francisco County. Precaution should be taken when work is being conducted in a known site for sudden oak death. According to the California Oak Mortality Task Force, as a precaution, tools should be cleaned and disinfected after use on confirmed or suspected infested trees. Additionally, tools should be sanitized before being used on healthy trees. Vehicles should be cleaned of mud, dirt, leaves and other woody debris before leaving an infested area. Tools and clothing should be disinfected with either Lysol® spray, 70 percent or greater alcohol, or chlorine bleach (1 part bleach to 9 parts water) (COMTF 2004). In addition to helping to prevent the spread of sudden oak death, these standard measures will help prevent the spread of other pathogens that may affect plants or amphibians."

Draft EIR p. 94 restates some of the information provided in the SNRAMP, focusing on cleaning and disinfecting tools after use on infected trees. In addition to the specific measures outlined above for sudden oak death, the SNRAMP's adaptive management strategy will allow for monitoring and management activities that are responsive to the specific conditions presented by individual species and/or habitats.

Removal of Invasive Species

The SNRAMP proposes the removal of invasive species throughout the Natural Areas as one strategy to ensure that native species grow and prosper. There are extensive stands of invasive species found within the Natural Areas, and the control and reduction of this vegetation is necessary before restoration and reintroduction of sensitive species of native habitat can successfully occur, as outlined in SNRAMP strategies GR-1, GR-2, and GR-3. As stated on Draft EIR p. 87, in general, MA-1 areas are the most biologically rich and represent the priority areas for conservation and management activities. MA-2 areas are the next most important conservation areas and offer the greatest opportunity for habitat restoration. MA-3 areas are the least biologically sensitive areas, yet offer unique opportunities for conservation and enhancement. MA-3 areas are largely urban forests that primarily consist of eucalyptus trees. Accordingly, the majority of the tree and/or vegetation removal activities would occur in the least-sensitive MA-3 areas. As an example, in certain MA-3 areas, where the understory of the forest is densely populated with invasive species, it becomes difficult for young oak trees to successfully germinate, become established, and reach maturity; therefore, those invasive species would be candidates for removal. Appendix F of the SNRAMP describes the species to be removed, removal methodology, snag retention and debris removal, target basal area, impacts on aesthetics, potential windthrow hazards, sightlines, and other tree removal impacts.

Natural History of Trees in San Francisco

One of the commenters indicated that it would not be possible to grow native trees in the Natural Areas because there were few native trees in San Francisco before the European settlement. Regardless of what was present in San Francisco prior to European settlement, the EIR assesses the environmental impacts of the proposed action as compared to existing conditions, which are the conditions that exist when the NOP was issued (in this case, in April 2009). However, the following information is voluntarily provided in response to the comment raised.

Prior to European colonization, processes that influenced community formation included storm events (e.g. windthrow and heavy salt deposition), fires, grazing, browsing, predation, nutrient cycling, disease outbreaks, insect infestations, and moderate physical disturbance by Native Americans. Pre-European vegetation patterns were a reflection of this physical context and these processes. In terms of native habitats, pre-European vegetation included coast-side plant assemblages that were dominated by coastal scrub, coastal grasslands, and an array of freshwater wetlands. Stands of maritime chaparral occurred on rocky uplands and stable dunes around the southern margin of Lake Merced. Dune scrub and dune wildflower assemblages were prominent. Bayside plant assemblages included more extensive perennial grasslands, wildflower fields, coastal scrub, riparian forest and scrub, freshwater and salt marsh, maritime chaparral, and stands of broad-leaved evergreen forest in protected canyons and coves around the bayshore. As stated on SNRAMP p. 3-4, trees were not a conspicuous component of the landscape.

SNRAMP pp. 7-2 and 7-3 go on to say that during the last 200 years, all of these Natural Areas have been impacted by factors associated with European colonization. Intense grazing and cultivation, water diversions, urban habitat destruction and fragmentation, disruption of processes such as the fire regime, and the introduction of numerous new plants, animals, fungi, and microbes have dramatically altered the landscape. Today, less than 5 percent of the land area of San Francisco can be recognized as containing these original native communities. These biotic remnants are still shaped by their physical context (e.g., local climate, substrate, and topographic relief) and historic processes (e.g., storm events, grazing, and fire); however, a new suite of factors is now impinging on this system. These factors include species loss, loss of predators, reduced native populations, habitat fragmentation, suppression of natural processes, competition with invasive species, and continuing urbanization.

Importantly, SNRAMP p. 7-3 concludes that human-generated disruption of historic natural patterns and processes has placed most if not all of these remnant communities and native populations at high risk of progressive degradation and eventual extirpation. If long-term preservation of San Francisco's indigenous biota is to be achieved, conservation management of these Natural Areas must track the status of natural populations and evaluate the impacts of human activities, and adjust and adapt management activities based upon on-going experience in meeting conservation goals. The SNRAMP is specifically designed to protect and enhance native diversity within Natural Areas that would, to the extent possible and feasible, offset the impacts of these stressors.

Also, regardless of what types of vegetation may have been present in San Francisco pre-European settlement, the EIR assesses the environmental impacts of the proposed action, and the EIR is not required to substantiate the need for the action.

Monitoring Activities

Ecological monitoring, which is outlined in SNRAMP Section 7, allows for the focusing of management activities on the areas of greatest need, and provides a method for evaluating the success of restoration and conservation projects. As stated on SNRAMP p. 7-1, the NAP is focused on the conservation and restoration of a diversity of Natural Areas that host populations of native species and natural communities. The general management goal for these areas is to protect and enhance native species, and to contain and control invasive species.

This program includes both quantitative and qualitative methods for measuring changes in the populations of species at risk and the general health of ecological communities. Many of the monitoring procedures outlined in this chapter are currently ongoing. Results from these and future monitoring efforts would be available through the NAP website at <http://www.sfrecpark.org>.

In terms of past restoration and revegetation projects, according to SFRPD staff, as a result of ongoing monitoring efforts, some have been successful and some have not, which is an anticipated

outcome for most, if not all, restoration projects. To respond to restoration and revegetation efforts that are not as successful as desired, an adaptive management approach is proposed to guide the ongoing management of the Natural Areas, as described on Draft EIR p. 90. As stated on SNRAMP p. 2-4, "This approach recognizes that some uncertainty exists about the nature of ecosystems and the organisms and processes that define them. Adaptive management, as applied to natural systems, involves a continuous cycle of systematically monitoring biodiversity and other ecosystem goals, and reassessing the plans, strategies/goals, methods, and questions that underlie the management approach. Land managers then use this information to evaluate success and failures, and to refine techniques and approaches." Adaptive Management is a flexible learning-based approach to managing complex ecosystems, executed in three general phases: (1) issues are identified and recommendations are developed, (2) a plan is implemented to address those issues and recommendations, and (3) a monitoring program is developed and implemented. An adaptive management approach is designed to respond to a variety of environmental and human conditions in a manner that will increase the chance of success. Among the successful revegetation projects are various sites along Islais Creek in Glen Canyon, the entryway plantings at Billy Goat Hill and Grandview Hill, scrub restoration at Corona Heights, Lake Merced, and McLaren Park, and various scrub and oak woodland restoration projects in Golden Gate Park.¹⁴¹

In a memorandum from Lisa Wayne, Open Space Manager, SFRPD, to Jessica Range, Environmental Planner, San Francisco Planning Department,¹⁴² the SFRPD indicated that each year, the NAP propagates and plants over 10,000 plants in restoration sites throughout the Natural Area restoration sites, with at least 200 of those plants being trees, which correlates to roughly 4,000 trees over the 20 year life of the SNRAMP and is greater than the approximately 3,448 trees anticipated for removal over this same time frame.

Urban Forests

The commenter's requests a summary of urban forest acres to be converted to other habitats, as well as a clarification of the plans for reforestation, including the type of trees proposed. While the SNRAMP doesn't provide specific data regarding the conversion of urban forest acres to other habitats, SNRAMP pp. 5-17 and 5-18 state that approximately 199 acres are classified as MA-3 urban forests within the Natural Areas. These urban forests are located in Bayview Park, Glen Canyon Park, Edgehill Mountain, Lake Merced, McLaren Park, Mount Davidson, Pine Lake, Interior Greenbelt, Dorothy Erskine Park, Corona Heights, Fairmount Park, and Sharp Park. It is estimated that about 35,000 trees occur in the MA-3 urban forests within San Francisco (see Appendix F and Response PD-34, RTC p. 4-210, for details on tree estimation methodology). The MA-3 areas are, by definition, the lowest-priority areas within Natural Areas (see Section 1 of the SNRAMP).

¹⁴¹ Memorandum from Lisa Wayne to ESA (Terri Avila) regarding revegetation success, September 12, 2014.

¹⁴² Lisa Wayne, Open Space Manger, "Tree Removal and Replacement," memorandum to Jessica Range, Environmental Planner, San Francisco Planning Department, November 27, 2012.

As reflected in Appendix F, pp. F-5 and F-6, estimates of trees in urban forests were calculated in two ways (saplings and seedlings are not included in tree estimates). For large urban forests, an estimate of 353 trees per acre was used. For smaller urban forests, such as Fairmount Park, Dorothy Erskine Park, and Corona Heights, tree estimates were adjusted based on rough visual estimates conducted by Natural Areas Program staff. Acreage of all non-native forest series were used in the calculation of tree numbers. The total acreage was multiplied by the appropriate estimate of trees per acre to generate the total number of trees per Natural Area. The resulting estimates were then rounded. For example, the 30.06 acres of invasive forest at Mount Davidson generated an estimate of 10,612 trees which was rounded to 11,000 trees. Acreages that resulted in tree numbers less than 1,000 were rounded to the nearest hundred and numbers less than 100 were rounded to the nearest 10 trees. These estimates were further divided into trees within each MA-1 and MA-2 area for a given Natural Area (Table F-1 in Appendix F of the SNRAMP).

The commenter also states that according to the US Forest Service, San Francisco's urban forest contained only two species of native trees that were found in sufficient numbers to be counted in the 194 plots they surveyed: coast live oak (*Quercus agrifolia*) and California laurels (*Umbellularia californica*). This information informed the SNRAMP, and, accordingly, native trees that would be planted include, but are not necessarily limited to, coast live oak (*Quercus agrifolia*), California wax myrtle (*Myrica californica*), dwarf California buckeye (*Aesculus californica*), and California laurels (*Umbellularia californica*). Section 6 of the SNRAMP provides the species that are anticipated to be planted in each Natural Area based on the SNRAMP's goals and the desired outcomes for each Natural Area.

The SNRAMP provides a framework for future restoration activities rather than detailed reforestation or restoration plans. As stated on SNRAMP p. 1-4, the SNRAMP:

“defines and delineates “Management Areas”, which represent differing levels of sensitivity, species presence, and habitat complexity within the 31 Natural Areas. Three levels of MAs have been defined as MA-1, MA-2 and MA-3, and all Natural Areas are categorized into one of these three categories.”

In terms of the preparation of reforestation plans (or more detailed restoration plans), SNRAMP pp. 1-10 and 1-11 provides the following description of how future management activities would be implemented:

“Each year management activities will be identified from the broader prescriptions of the management plan for implementation. NAP Work Plans will be developed annually to reflect site-specific objectives and resources, such as staffing, volunteer groups, grants, capital funds, or other resources, available for that year. In general, NAP Annual Work Plans will prioritize activities (Appendix J) in MA-1 areas above actions in MA-2 or MA-3 areas. Each year Natural Areas Work Plans will be presented to the public at SFRPD's Annual Capital Planning Fair. This yearly event will be an opportunity for the public to understand and comment on SFRPD's priorities for Natural Areas improvements for the

coming year, as well as its activities in the past year. In addition, NAP Work Plans and the results of monitoring activities will be available for posting on the internet. Periodic tours of restored areas will be conducted for the general public's education as resources are available."

Lastly, in terms of promoting successful restoration efforts, monitoring and adaptive management activities, as described under the "Monitoring" section above, provide a valid method for enhancing the likelihood of success of restoration and conservation projects. To further put the planning efforts (as reflected in this SNRAMP) and implementation efforts (as reflected by future activities) in context, SNRAMP pp.2-4 and 2-5 says:

"Restoration projects have two components: planning and implementation. It is important to have good planning, including a clear reason that justifies the restoration project, a discussion of the project in relation to the reference site and the surrounding ecosystem, and clearly articulated goals, objectives, and performance criteria (SER 2004). Implementation requires detailed plans, schedules, and procedures for dealing with potential problems, explicit performance criteria, and a long-term monitoring strategy (SER 2004). Ecosystem goals, objectives and supporting policies are described in Sections 1 and 2 of this Final Draft. Sections 3 and 6 provide the regional and site-specific information necessary to discuss how the proposed restoration project fits into the overall landscape. Site-specific plans are not included within this document, but are developed in the form of annual work plans by NAP. This Final Draft includes a detailed monitoring protocol that will allow for evaluation of restoration performance (Section 7)."

Windthrow

In terms of windthrow, in general, tree removal in the Natural Areas is planned to remove individual trees or very small groups of trees in forest and scrub habitats, which would also avoid altering the wind conditions and increasing ground-level wind hazards. Windthrow effects are addressed in detail on Draft EIR pp. 243 through 250, with the analysis concluding that no impact or less-than-significant impacts would occur.

Draft EIR p. 248 states that windthrow rates at Sharp Park may be relatively higher following tree removal. This Natural Area is exposed to strong westerly winds that funnel up off the beach and through the canyon. However, the trees would not be removed all at once, and gradual removal would not substantially elevate windthrow rates. Even if windthrow were to increase substantially in this portion of the Natural Area, the risk to people is minimal because there are no residences or sidewalks, and the canyon east of the archery range is inaccessible. Therefore, the Draft EIR p. 248 concluded that an increase in wind levels at Sharp Park resulting from the programmatic projects would be less than significant.

Comment BI-34 Provide square footage and percentages of trees to be removed

The response to Comment BI-34 addresses all or part of the following individual comments:

MPIC-1-07

Bose-2-02

Bowman-2-06

- Also, the DEIR is does not clearly define the planned scope and specific impact of the 1,000-tree removal planned for the MA-1c area: what percentage are these 1,000 trees to be removed of the existing forest in that area: 100%, 75%, 50%, or 25%? If 50% or more, this would more than just thin the historic forest – it would decimate it, a significant negative impact to this historic resource. The EIR should detail the square footage of the MA-1c, MA-2c, and MA-2e areas where trees would be removed and provide the estimated percentage of trees to be removed from each one. These numbers would help to ascertain the environmental impact with respect to what recreational users will experience within the park. [MPIC-1-07]
- The final EIR should explicitly discuss the impact of tree felling in each specific area. Thank you for the opportunity to comment. [Bose-2-02]
- 3. Correct the “existing” trees and clarify impact of trees removed since initiation of SNRAMP

1.3 Correct the “existing” trees and clarify impact of trees removed since initiation of SNRAMP

The DEIR existing trees must be reevaluated to correctly state the actual trees existing at each site. Rec & Park presentations to the public, media, and decision makers about the DEIR almost always refer to the percentage of trees to be removed, which indicates the importance of correctly stating the existing number of trees so that this percentage is fairly stated.

As an example, Pine Lake indicates systemic problems with the tree numbers presented in the DEIR. HORT Science conducted a tree survey at Pine Lake in March 2011 for Rec & Park and identified only 229 trees at Pine Lake, which includes the 82% of Pine Lake acres that is not in the Natural Areas. This indicates that it is impossible for 1000 trees, as stated in Table 5, to exist on the 8.4 NAP acres, which is largely open water and Riparian vegetation with small shrubs and a highly thinned MA-3 and MA-2 forest. It also indicates that the methodology for determining existing trees is flawed and needs to be corrected to more accurately reflect the number of existing trees summarized in Table 5 and also contained in the Forestry Appendix F. Otherwise, the percentage of tree removal will be significantly misstated for those reviewing the final EIR and in presentations to the public. Also, existing tree counts represented for Glen Canyon and Mt Davidson are of particular concern because the numbers do not seem reasonable based on the actual density of trees and the existing open spaces with few trees in the zones included in the tree acreage. Because the number and percentage of trees is such a significant measure used in all presentations regarding the DEIR, the DEIR should reflect the actual trees at the sites not some highly inaccurate estimate which overstates the existing trees and thus significantly understates the percentage of trees to be removed.

It is also not stated in the DEIR as to whether trees removed since the creation of SNRAMP are included in the “existing” or “to remove” trees or neither, which is important information for decision making and for understanding the impact of the proposed plan. As examples of trees that have already been removed since the creation of NAP, according to the SNRAMP Forestry Appendix F, Pine Lake had 132 trees removed in 2006 and the DEIR Table 5 shows no additional trees to be cut. Note that extensive numbers of trees have also already been removed by various trail projects (e.g., Corona Heights, Interior Greenbelt, Grand View), by vandals (e.g., Glen Canyon), by construction projects (e.g., Mt Davidson), by tree assessment projects (e.g., Pine Lake, Interior Greenbelt), etc.

The on-going deforestation at Grand View and Pine Lake in the MA-3 forests is also a concern since even in areas that SNRAMP proposes to maintain forests; the areas are being converted to native plants instead of retaining the forest. See *Attachment C* for pictures of trees removed and the new native plant gardens in areas zoned as MA-3 forests at Pine Lake. Also, below is the Google Map street picture from April 2011 for Grand View that shows young cypress trees that are not at Grand View after the 2008 Bond Trail Restoration. Note these young trees are in a zone designated as MA-3 where SNRAMP proposes to retain the Cypress trees. As shown in the picture the MA-3 zone has numerous tree stumps instead of Cypress trees. This illustrates how the “no project” status is also significantly detrimental to the aesthetic and scenic value of the Natural Areas and pictures showing these changes in the DEIR should be shown in the DEIR.

Picture 1: Screenshot from Google Maps street view of Grand View. Google Maps shows that the picture was taken in April 2011. I added the circle to show several young cypress trees that are no longer at Grand View. One of the young cypresses is still there but it appears to be outside the RPD park boundary.

Picture 2: A large section of trees were remove at the Stanyan entrance of the Interior Greenbelt, which is also a MA-3 zone. [Bowman-2-06]

Response BI-34

These comments request more definition regarding the scope and specific impact of the tree removal planned for the MA-1c area at Mount Davidson; the impact of tree felling in each area; a clarification of existing trees (as opposed to those removed since inception of the SNRAMP process); and the ongoing deforestation at Grand View and Pine Lake in the MA-3 forests.

Table 5 on Draft EIR p. 114 provides management acreage (i.e., MA-1, MA-2, and MA-3) for each of the Natural Areas and also provides the number of invasive trees that are existing, would be removed, and would remain based on the SNRAMP. Draft EIR Table 5 indicates that of the 117,433 invasive trees located within the Natural Areas (including Sharp Park), 18,448 trees (or 16 percent) would be removed and 98,985 trees (or 84 percent) would remain. Of the 18,448 trees that would be removed, 15,000 trees would be removed in Sharp Park and 3,448 trees would be removed in the San Francisco Natural Areas. No trees would be removed at Pine Lake. Since the commenter who requested specific information about tree removal appears to be addressing Mount Davidson

(Comment MPIC-1-07), specific information about Mount Davidson in terms of trees removed and the basal area per acre of trees that will remain is provided in this response. As described on SNRAMP pp. 6.2-8 and 6.2-9, 1,600 of 11,000 trees would be removed (or 14.5 percent, with 85.5 percent remaining). SNRAMP pp. 6.2-8 and 6.2-9 goes on to say the following:

“Recommendation MD-1b: In order to enhance the sensitive species habitat that persists in the urban forest understory and at the forest-grassland ecotone, invasive blue gum eucalyptus trees will be removed in select areas. Coastal scrub and reed grass communities require additional light to reach the forest floor in order to persist. Approximately 1,600 of an overall 11,000 trees on Mount Davidson would be removed from MA-1 and MA-2 areas (Appendix F). Approximately 9,400 trees would remain in the urban forest at Mount Davidson. Not all trees in MA-1 and MA-2 areas will be removed. Some scattered large individuals will remain in order to minimize large scale disturbance and disruption to wildlife and to promote a gradual conversion to reed grass prairie. However, eucalyptus seedlings and saplings will not be allowed to establish in these areas. An average of 50-100 or 100-200 square feet of basal area per acre will be retained in MA-1 and MA-2 areas respectively. The short- and long-term impacts of tree removal are discussed in Appendix F. Below is a description of where tree removal would occur (see also Figure 6.2-5):

- Remove approximately 1,000 small and medium sized eucalyptus trees, leaving large cypress and eucalyptus trees in MA-1c.
- Remove approximately 200 eucalyptus, leaving some large trees for structural diversity (MA-2c).
- Remove approximately 300 small to medium sized and 100 large eucalyptus trees, some large trees will remain (MA-2e).
- All MA-3 areas will be managed as urban forests (GR-14).”

However, Draft EIR pp. 286 through to 362, which comprise the Biological Resources section, discusses tree removal throughout. As with the entirety of the EIR, impacts are addressed on a project-level and programmatic basis, rather than by Natural Area, since the specific activities that could occur within each Natural Area may vary in response to the conditions that are presented and the restoration goals that are most desired within the overall framework provided by the SNRAMP. All biological impacts, including those related to tree removal, are either less than significant or could be reduced to a less-than-significant level with the implementation of all identified mitigation measures.

One commenter is also concerned about the tree removal at Grandview Park. As indicated in Draft EIR Table 5, five trees of 25 trees would be removed.

Another commenter indicated that the HORT Science Tree Survey at Pine Lake in March 2011 identified 229 trees, whereas Table 5 of the Draft EIR identifies 1,000 existing trees in this same area. If tree surveys use different assessment methodologies or are conducted at different times, it can

lead to different results between the surveys (such as the case of the HORT Science Tree Survey and the SNRAMP Tree Survey). Appendix F of the SNRAMP describes how the tree survey was performed for the SNRAMP, and this survey methodology was applied consistently to all of the Natural Areas. Refer to Response PD-34, RTC p. 4-210, for a more detailed discussion of the methodology used for estimating trees in urban forests.

Refer to Response G-3, RTC p. 4-19, for a discussion of previous NAP actions and the environmental clearance that was achieved to support those activities. Further, the cumulative analysis for this project considers past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; therefore, past projects are also considered in the cumulative analysis for this project.

Comment BI-35	Discuss brush pile creation where tree trimming or removal is planned
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The response to Comment BI-35 addresses all or part of the following individual comment:

GGAS-1-29

- Overall, the DEIR would be improved by including a discussion of the value and creation of brush piles in areas where tree trimming or tree removal is planned. Brush piles can provide immense value for wildlife and suppress invasive plant growth. [GGAS-1-29]

Response BI-35

This comment suggests that the Draft EIR discuss the value of brush piles in areas where tree trimming or tree removal is planned.

The proposed project includes recommendations related to the creation of brush piles; specifically, Draft EIR Chapter III, Project Description, p.109, references SNRAMP General Recommendation GR-4d, which states that SFRPD would “[u]se material from brush and tree trimming to increase nesting or escape habitat for ground-dwelling birds and to mitigate any loss of habitat from other vegetation clearing.” Further, General Recommendation GR-4d also indicates that “Brush piles shall be located out of public sight wherever possible and without creating public safety hazards (e.g., fire hazards). Hedgerows created from cut material shall be placed so that they connect scrub habitats and provide movement corridors for ground-dwelling birds.”

As stated in PRC Section 21002.1, the purpose of an EIR is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided; therefore, CEQA focuses on identifying the potentially significant adverse impacts of a project, rather than project benefits. While project benefits can be identified in an EIR, it is more likely that such benefits are described in the Statement of Overriding Considerations prepared by a Lead Agency, which states in writing the specific reasons to support its action based on the final EIR and/or other information in the record when significant impacts are not avoided or substantially lessened. If the specific economic, legal, social,

technological, or other benefits, including region-wide or state-wide environmental benefits, of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered “acceptable.”

Comment BI-36 Replacing nonnative vegetation with more appropriate native vegetation is self-contradicting

The response to Comment BI-36 addresses all or part of the following individual comments:

Bartley-1-12

Bose-1-11

- Wasting time and money on certain invasives that can't be overcome: A popular trend amongst evolutionary biology scientists and ecologists is that we need to accept that many of the species that have been human introduced are impossible to remove so we might as well get used to it. European grasses and some shrubs (i.e. Broom) are a prime example of that locally. The fertile SF Bay itself may be the most dramatic regional example of introduced species gone wild. Still, some particularly disadvantageous species can be controlled relatively easily or wiped out altogether. [Bartley-1-12]
- Pg 195: ... all removed vegetation would be replaced with native vegetation that is more appropriate for the area's precipitation pattern, water availability, animal populations, and local ecosystems, thereby allowing the new vegetation to thrive more successfully than the invasive vegetation.

This statement is self-contradictory. If the invasive vegetation is not thriving more successfully than other vegetation, it is not invasive. Moreover, there is practical evidence that native vegetation does not in fact thrive more successfully but instead requires irrigation to get established, followed by continuing maintenance in the form of herbicides and replanting. The rising use of herbicides by the NAP attests to this, as do the thousands of volunteer-hours it uses for maintenance. [Bose-1-11]

Response BI-36

These comments express an opinion that it may not be possible to remove invasive species and, further, that native vegetation does not thrive more successfully than invasive species.

As stated on SNRAMP p. 1-3, one of the objectives of the Plan is to promote the functioning of San Francisco's native ecosystem, including the maintenance of native biodiversity, which requires the removal of invasive species. Response BI-24, RTC p. 4-420, indicates that invasive species are capable of spreading rapidly and displacing native plants because they are adapted to similar climatic conditions, lack predators or pests, and have other auto-ecological characteristics that allow them to thrive. SNRAMP p. 4-2 expands on this concept, stating that:

“Foreign species may become established in this country with little or no competition from native species, and eventually displace some native species (APHIS 2000). There are several organizations devoted entirely or in part to the monitoring, control, and removal of invasive exotics (e.g., the California Exotic Pest Plant Council [CalEPPC] and

the Center for Invasive Plant Management). The Nature Conservancy has an entire team devoted to this issue. In a policy memo, the Nature Conservancy discussed the impacts of invasive species. The memo stated that: (1) three-quarters of the operating units of the Nature Conservancy believe that invasive species are a threat to their conservation planning and that all their lands are at risk; (2) as many as 46 percent of the plants and animals in the United States that are Federally listed as endangered are adversely affected by invasive plants; and (3) invasive plants represent an annual cost to the people of the United States of about \$137 billion (Bartuska 2002). The California Native Plant Society (CNPS) has established a policy on its approach to the issue of invasive species. Although lengthy, the essence of this policy is that the CNPS urges coordination of planting and management, education, control measures that do not affect the native habitats, and expansion of volunteer restoration efforts (CNPS 1996). Some native plant species can coexist with exotics, and it is not uncommon for introduced species to become naturalized in native plant communities without altering natural ecosystem functions. However, a handful of invasive plant species have the potential to overwhelm and displace native ecosystem biodiversity, reducing native plant populations and seriously changing the fundamental ecosystem processes (Mullin et al. 2000; USDA 1999). As the number of indigenous plants decreases, so too do the insects, birds, and other animal species that depend on the diversity of these plants for food, shelter, and reproduction.”

Eliminating nonnative invasive species and replacing them with native species requires intervention and maintenance. First, the nonnative species must be eradicated (applying the principals of the City’s least-toxic decision-making model), and native species must become established, which requires planting, irrigation, and ongoing monitoring for a period of time. The goal is to encourage biodiversity, which would allow the return of those sensitive plants, animals, and habitats that had previously thrived within San Francisco.

The native species that would be reintroduced are conceptually identified in the SNRAMP under the discussion for each Natural Area. Also, refer to Response PD-11, RTC p. 4-159, for a discussion about the importance of biodiversity for the San Francisco area, as well as the policy framework that supports biodiversity through implementation of the SNRAMP. Refer also to Response PD-31, RTC p. 4-206, and Response BI-33, RTC p. 4-457, for a discussion of the successful restoration efforts completed under the supervision of the SFRPD.

4.D.11 Geology and Soils [GE]

The comments and corresponding responses in this section cover topics in Draft EIR Chapter VI, Section VI.F.5, Geology and Soils.

Comment GE-1 Erosion control measures should be site-appropriate, certified weed free, and composed of natural fiber

The response to Comment GE-1 addresses all or part of the following individual comments:

NPS-1-03

GGAS-1-10

- Erosion Control – Mitigation measures should include a requirement that erosion control materials be certified weed free, and when possible, certified wheat free. We also suggest that any erosion and sedimentation control materials, such as wattles, not be made of anything but natural fiber. We suggest that plastic mono-filament or biodegradable plastics not be used for erosion control where frogs or snakes may become entangled or trapped in it. [NPS-1-03]
- Golden Gate Audubon encourages the use of site-appropriate erosion control measures. (See DEIR, at 93) For example, in the past, the RPD has dumped piles of redwood chips along Lake Merced, which has resulted in (likely illegal) discharges of the chips and their chemical components into the Lake, changing its chemical composition and adding pollutants. [GGAS-1-10]

Response GE-1

These comments request that the SNRAMP uses site-appropriate erosion control measures, and several suggestions are made regarding the potential erosion control measures. Another comment suggests that SFRPD had dumped piles of redwood chips along Merced, likely illegally.

SNRAMP p. F-4 states that “Unless it can be used to create wildlife habitat (see Section 5, GR-9) all large woody debris will be chipped on site, stockpiled in visually hidden places or removed manually off-site. Some of the chips may be used to deter understory invasive vegetation in the stand, or could be used as beneficial mulch on other revegetation projects in Natural Areas.”

In response to the above comments addressing erosion control measures and the materials used, the SFRPD has amended the SNRAMP project. When alternative materials are available, a preference would be given to the use of biodegradable, certified weed-free, and wheat-free erosion control materials to minimize inadvertent impacts to wildlife and habitat. In addition, to ensure that appropriate materials that are compatible with the materials and features present at the sites are used, a qualified SFRPD biologist would be consulted during design of erosion control measures. The text on Draft EIR p. 94 (after the second bullet) has been changed, as follows:

Where alternative materials are available to achieve the intended erosion control objectives while also minimizing inadvertent impacts to wildlife and habitat, a preference would be given to the use of biodegradable, certified weed-free, and wheat-free erosion control materials. To help ensure that

appropriate materials are used that are compatible with the materials and features present at the sites in which they are used, a qualified SFRPD biologist would be consulted during design of erosion control measures.

Refer also to Response HY-6, p. 4-503, for a discussion of practices contributing to algal blooms, which could be caused by a change in the chemical composition of a waterbody.

Comment GE-2 Drifting sand impacts and mitigation measures

The response to Comment GE-2 addresses all or part of the following individual comments:

GGHNA-1-01

GGHNA-1-02

Campbell-N-1-01

- GGHNA has repeatedly expressed our concerns about damage to neighboring homes and property from drifting sand from the parks in our neighborhood, about plans to remove trees from the natural areas, and about poor maintenance in natural areas. We worry that our concerns have been ignored. Indeed, there is little in the NAP EIR to indicate they have been heard.

The Golden Gate Heights Neighborhood Association appreciates the opportunity for us to give, yet again, our comments about the NAP and the NAP EIR. We feel that the NAP EIR is not adequate in the above areas, and that it must be revised to consider the impacts we outlined above. Thank you. [GGHNA-1-01]

- The analysis of impacts from drifting sand is inadequate.

Years ago, drifting sand was a BIG problem in our neighborhood, especially around Grandview Park and the Rock Outcrop. The parks in Golden Gate Heights are located on the westernmost hills in San Francisco. There is literally nothing that stands between Asia and us and the wind frequently screams through our neighborhood. The wind picks up any open sand in the parks and essentially “sand blasts” our homes, our property, and ourselves. Over the years, neighbors at Grandview and the Rock Outcrop experimented with plants to stabilize the sand in the parks and found that iceplant was the only thing that really worked. While there was still some drifting sand, it was minimized.

Then about ten years ago, NAP staff began tearing up the iceplant and replacing it with native plants. Drifting sand is once again a problem in our neighborhood. The sand blows into people’s backyards, damaging their property, fills the streets, and clogs the sewers. This is especially concerning on 14th Avenue below the Rock Outcrop, where a very narrow street becomes even narrower when sand drifts into the street. In 2006, a house on 14th Avenue was red-tagged after a major landslide in the backyard smashed into it. The house is immediately adjacent to the Rock Outcrop, where NAP staff had removed large amounts of iceplant. While we cannot say definitively that the iceplant removal caused the landslide, we are concerned that it might have had at least some impact.

At a GGHNA meeting several years ago about the NAP, homeowners who live adjacent to Grandview complained about damage to their backyards from sand that had drifted into them after iceplant in Grandview that had held the sand in place was removed by RPD. NAP

staff at the meeting responded that RPD has no “legal” responsibility for damage to property outside of a park caused by sand that drifted into their backyards from the park because of the actions by NAP staff (removing iceplant).

When the NAP Management Plan was released in 2006, it called for “scattered, open sand” in all the natural areas in our neighborhood. Given the NAP staff’s arrogant response to our members’ concerns about damage, the plan to have scattered, open sand in the parks in our neighborhood has been of great concern to us.

The NAP EIR does not adequately address concerns, especially at the four parks in our neighborhood, about impacts of drifting sand on people’s land and property that is immediately adjacent to the parks. This must be considered, and mitigations proposed (such as no scattered, open sand) to address the impacts. We know there are impacts. We see them daily. The NAP EIR must consider these impacts as well. [GGHNA-1-02]

- I no longer live in San Francisco but I was born there as was my Mother and Grandparents. My Grandparents used to tell me of the wind and the blowing sand when the dunes were planted with only the small natural dune plants. They were always so grateful when other types of planting even though non-native were planted. Those plantings saved the dunes from tragic sand erosion, sand blowing that matched the dust bowl.

Do you really want to be responsible for a repeat of that.

Leave the plantings as they are, some of the planting may not be native species but they are mature, hold down the soil, feed the bees which are having a very hard time and on which a great majority of our food pollination depends, provide nectar for the Monarchs and Hummingbirds not to mention the vast numbers of songbirds and migratory avian species.

We do not need to be part of the hysteria over native vs non-native. The plantings as they are serve our area well in many many ways. [Campbell-N-1-01]

Response GE-2

These comments express concern regarding drifting sand from SFRPD parks and suggest that the Draft EIR analysis of this issue is inadequate.

In response to these comments, as indicated in RTC Section 5.A, Changes in Response to Comments, the text on Draft EIR p. 460 (last paragraph) has been changed to further clarify the proposed project and potential erosion that could arise from removal of plants on sandy soils, as follows:

In addition to these BMPs, ~~additional~~ practices outlined in the SNRAMP specifically designed to minimize erosion include removing only small areas of vegetation at any one time (GR-1c), and, to the extent possible, performing work that involves exposure of large areas of soil during the dry season (GR-12b). As further described in the SNRAMP, the Natural Areas at Grandview Park, Rock Outcrop, Golden Gate Heights Park, and Hawk Hill belong to a remnant ridge-top sand dune system in the western portion of San Francisco. Areas of exposed sand in these parks are subject to erosion due to wind, runoff, and foot traffic on social trails established on steep slopes. The proposed management actions in these Natural Areas, including removal of iceplant and other nonnative vegetation, would be undertaken in a manner to reduce and control erosion. For

example, Recommendation GGRH-1f specifies that: “[i]n areas where large-scale removal of invasive vegetation could lead to increased soil erosion (removal of iceplant at Hawk Hill, for example), the vegetation removal shall only occur in small, non-adjacent patches. Currently, herbicides are being applied in this manner to small patches of iceplant at Hawk Hill. Once the iceplant dies it shall be left in place to retain the sandy soils while native species recolonize the area.” Removal of nonnative trees would be limited in these natural areas to approximately five trees from the upper slope at Grandview Park. Implementation of Recommendation GGRH-1e would help to stabilize sandy soils and prevent and control erosion due to wind and runoff by maintaining and enhancing native dune scrub vegetation at each of these four Natural Areas. Revegetation following removal of invasive plant species along with the installation of erosion control measures in the BMPs described above would help control erosion.

The SNRAMP also includes proposed management actions to reduce erosion in these natural areas due to foot traffic on social trails. The proposed actions include the use of signage and fencing to discourage use of social trails on steep erodible slopes at each of these Natural Areas, installation of timber steps (similar to the “sand ladder” at Baker Beach) at Hawk Hill, and installation of soil retaining boxes on the downhill side of the landings to minimize erosion at Grandview Park. None of the geology and soils effects ~~were~~ was found to be significant.

With the implementation of the SNRAMP management actions, the proposed project would not result in substantial soil erosion or result in on- or off-site landslides in areas with remnant sand dunes. Refer also to Response BI-15, RTC p. 4-402, for a discussion of the impacts of retaining nonnative trees and vegetation.

Comment GE-3	Erosion impacts from habitat restoration and/or tree removal
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The response to Comment GE-3 addresses all or part of the following individual comments:

MPIC-2-16
Johns-1-05

SFFA-3-04
Thomas-1-02

Gomez-1-02
Valente-1-05

■ **IV. Erosion**

As acknowledged in the SNRAMP, the urban forest on the western portion of Mt. Davidson Park has steep slopes, with groundwater seep at the base of the outcrop. There is also substantial groundwater seep or underground stream/aquifer runoff during heavy rain storms on the southern slope, which drains onto adjoining properties. Many homes have had to build channels for the run-off in their basements and garages to prevent flooding of their homes. The SNRAMP further acknowledges that the heavy vegetation cover in many areas aids in preventing trail and slope erosion. The SNRAMP is incorrect in stating that all erosion and soil issues relate to the trail system and public use. This may be the case now, but the proposed concentrated tree removals will likely result in much more significant erosion and soil issues, potentially creating conditions for landslides onto abutting properties.

In 1998, native plant activists removed stands of French Broom from the bottom of the eastern slope of the Mt Davidson. As 1998 was an el Niño year, subsequent rains carried the upper layer of dirt and rock, no longer anchored by roots, into the back patios and homes of those living adjacent to the park, endangering life, damaging property, and resulting many

thousands of dollars in costs for some home owners. A USGS assessment stated that, although the area is seismically sound, the bedrock and shale of the steep mountainside has a 4 to 7 foot deep layer of loose matter, which is liable to slide under some conditions – as when the topsoil is not anchored. The current vegetation has proved sufficient to prevent this. Grass and brush will not provide the same safeguard. Were the mountain whole and uninhabited, this would be of no great concern, but the construction of the forties and the fifties terraced the hills, cutting into the bedrock and leaving the top strata unsupported, creating conditions favorable to a minor landslide like the deadly and destructive 1942 Foerster slide, which occurred below an area of native grasses.

The DEIR should include a requirement for detailed soils and geologic surveys and analyses of the MA-1 and MA-2 zones by a qualified engineer with respect to the SNRAMP project plan before any tree removal would be allowed. The DEIR's conclusion that the substantial erosion and siltation that could occur from the tree removal could be mitigated is based on insufficient analysis of the actual geology and hydrology of Mt. Davidson Park. This proposed removal of the heavy vegetation there now would substantially increase storm water and groundwater runoff from the steep slopes of the park and cause a significant adverse impact on adjoining properties. Limiting the mitigation to revegetation with grasses in lieu of the tree roots and thick shrubs there now would likely not be sufficient to prevent such adverse effects. More expensive and extensive mitigation may be required, such as retaining walls and other structures, unless the proposed level of tree elimination is substantially reduced.

The DEIR claims that increased run-off and erosion will be prevented by revegetating areas in which non-native plants and trees are eradicated. **This claim is based on these erroneous assumptions:**

- > **That native plants will quickly occupy the bare ground on which they are planted.**

In the 15 years in which the NAP has been engaged in its enterprise, it has not successfully vegetated the bare ground created by eradicating non-native plants and trees. Denuded areas are quickly occupied by annual grasses that die back to leave bare ground during the dry season.

- > **That grassland and dune scrub and non-native trees are equally capable of absorbing run-off and stabilizing soil.**

This assumption is contradicted by the following scientific studies:

- **“Results indicate that smoothing of precipitation intensities may translate into overall greater stability of hill slopes under forest canopies.** In general, peak intensities of through-fall were damped in intensity and lagged in time relative to peak intensities of rainfall. Damping and lagging of rainfall intensity at both study sites generally increased modeled slope stability relative to openings (areas with no canopy).” (Keim & Skaugset 2003)
- **“The reinforcement of the main body of a dike by a grove of trees is much higher and effective in comparison to the reinforcement of the top soil layer by a grass**

sward. The increase in stability against landslides was found to be least ten times higher.” (Lammeranner & Meixner 2009)

Leaving tree stumps in the ground will not prevent erosion.

The DEIR claims that the removal of trees will not result in erosion because: “...tree removal would be selective, would be implemented gradually over several years, would involve limb-by-limb removals, and would leave tree stumps and root balls intact.” (DEIR, page 364) These claims are inconsistent with SNRAMP, incredible, and/or contradicted by scientific studies:

- > As we have already discussed, trees have been selected for removal by SNRAMP in large groups wherever they shade native plants. Some of these groups are as large as 1,000 trees on 3.5 acres of Mt. Davidson. Such removals cannot be accurately described as “selective.”
- > It is simply not believable that 18,500 large trees will be removed “limb-by-limb.” What public entity would ever be in a position to pay for such a laborious removal? Nor is it believable that 18,500 trees will be taken down piecemeal over a long period of time. This would be both physically difficult and prohibitively expensive.
- > **Leaving “tree stumps and root balls intact” does not prevent erosion. There is considerable scientific evidence that erosion results when the roots die:**
 - “The immediate effect of deforestation is, therefore, favorable, but adverse effects become evident when root systems decay and when a drop in evapo-transpiration causes a rise in the ground water table.” (Brown & Sheu, 1975)
 - “Measurement of the decline in tensile strength of small roots in coastal British Columbia after death of the parent tree indicates that over half the strength is lost within 3 to 5 years after cutting.” (O’Loughlin, 1974)
 - “Soil strength increased linearly as root biomass increased. Forests clear-felled 3 years earlier contained about one-third of the root biomass of old growth forests.” (Zeimer, 1981)
 - “Decay of tree roots subsequent to logging was found to cause a reduction in the shear strength of the soil-root system.” (Wu, McKinnell & Swanston, 1979)

The DEIR’s assumption that increased run-off and erosion will not result from the implementation of SNRAMP does not take into account that **the potential for both run-off and erosion are significantly increased by the steepness of slope**. Some of the planned tree removals will occur in very steep terrain:

Tree Removal As Related to MA Area and Terrain

<i>Natural Area</i>	<i>MA</i>	<i>Tree Removals</i>	<i>% Trees Removed</i>	<i>% Slope*</i>
Interior Greenbelt	MA-2a	100	28%	67%
Mt. Davidson	MA-1c	1,000	82%	40% - 67.5%
	MA-2c	200	31%	33% - 90%
	MA-2e	400	23%	20% - 70%
Bayview Hill	MA-2a	70	32%	55.6%
* Determined by using topographical maps in SNRAMP for each natural area				

These are only examples of the steepness of slopes in many of the natural areas. The EIR should be morally and legally obligated to evaluate the steepness of all of the natural areas in the context of the potential for increased run-off and erosion resulting from the removal of non-native trees.

The potential for increased run-off and erosion is greatly increased by steep slopes. The DEIR has not considered that many of the planned tree removals will occur in very steep locations. Some of these locations are directly uphill from densely populated residential neighborhoods, which would be in the direct path of both run-off and landslides caused by erosion. Yet, the risks to these residential neighborhoods have not been considered by the DEIR. The residential neighborhoods surrounding Mt. Davidson are particularly vulnerable to increased run-off, erosion and landslides.

On 5/23/2012, the State of California sued the US Army Corps of Engineers to challenge a national policy "requiring the removal of virtually all trees and shrubs on federal levees." (<http://cdfgnews.wordpress.com/2012/05/23/dfg-sues-army-corps-to-protect-fish-and-wildlife-around-levees>) Donald H. Gray, Professor of Civil and Environmental Engineering at the University of Michigan, provides the following explanation for why California is fighting this federal requirement:

"In the long run, cutting of trees on slopes leads to a gradual decrease in mass stability as a result of the decay of roots which previously acted as tensile reinforcements on the slope. Root decay can also lead to the formation of pipes in slopes, which promote internal or seepage erosion. The removal of tree canopy results in the loss of interception and evapo-transpiration, which tends to promote wetter and less secure slopes. Canopy removal also results in less attenuation in the delivery rate of rainfall to the ground surface."

(ftp://136.200.241.91/outgoing/FMO/Veg_on_Levees/Literature%20Reviews/Effects%20of%20Tree%20Removal.pdf)

The City and County of San Francisco should consider the implications of this suit. If the State of California is willing to sue to keep trees on its levees in order to prevent erosion and flooding, what are the prospects that the City and County of San Francisco can successfully defend itself against a legal challenge to its plans to remove 18,500 mature trees from the parks managed by the City of San Francisco?

The final EIR must evaluate the risk of increased run-off, erosion and landslides. It must substantiate, using scientific studies, the DEIR's baseless claims that the removal of thousands of trees will not increase this risk. If the final EIR cannot provide scientific evidence that these tree removals will not increase these risks, it must mitigate these risks by decreasing plans for tree removal in natural areas where these risks are great because of steepness and/or the proximity of residential properties potentially endangered by the tree removals. [MPIC-2-16]

■ **5. Tree removals will increase run-off, resulting in erosion and landslides**

The DEIR concludes that the implementation of SNRAM will not cause increased sedimentation, reduced water quality, erosion, or increased run-off, for example:

“The potential for erosion would be less than significant through implementation of the GR-12a (revegetate steep slopes) and GR-12b (phased invasive species removal to reduce erosion), erosion control measures and the erosion and sediment control BMPs described in M-HY-1.” (DEIR, page 374)

We will examine each of these assumptions in the light of scientific studies and our actual experience with the Natural Areas Program.

Revegetating steep slopes will not prevent erosion and increased run-off

The DEIR claims that increased run-off and erosion will be prevented by revegetating areas in which non-native plants and trees are eradicated. **This claim is based on these erroneous assumptions:**

- > That native plants will quickly occupy the bare ground on which they are planted.
 - In the 15 years in which the Natural Areas Program has been engaged in its enterprise, it has not successfully vegetated the bare ground created by eradicating non-native plants and trees. Denuded areas are quickly occupied by annual grasses that die back to leave bare ground during the dry season.
- > That grassland and dune scrub and non-native trees are equally capable of absorbing run-off and stabilizing soil.
 - **This assumption is contradicted by the following scientific studies:**

“Results indicate that **smoothing of precipitation intensities may translate into overall greater stability of hillslopes under forest canopies**. In general, peak intensities of through-fall were damped in intensity and lagged in time relative to peak intensities of rainfall. Damping and lagging of rainfall intensity at both study sites generally increased modeled slope stability relative to openings (areas with no canopy).” (Keirn & Skaugset 2003)

“The **reinforcement of the main body of a dike by a grove of trees is much higher** and effective in comparison to the reinforcement of the top soil layer by a grass sward. The increase in stability against landslides was found to be at least ten times higher.” (Lammeranner & Meixner 2009)

Leaving tree stumps in the ground will not prevent erosion.

The DEIR also claims that the removal of trees will not result in erosion because: "... tree removal would be selective, would be implemented gradually over several years, would involve limb-by-limb removals, and would leave tree stumps and root balls intact." (DEIR, page 364) These claims are inconsistent with SNRAMP, incredible, and/or contradicted by scientific studies:

- > As we have already discussed, trees have been selected for removal by SNRAMP in large groups wherever they shade native plants. Some of these groups are as large as 1,000 trees on 3.5 acres (Mt. Davidson). Such removals cannot be accurately described as "selective."
- > It is simply not believable that 18,500 large trees will be removed "limb-by-limb." What public entity would ever be in a position to pay for such a laborious removal? How is it even physically possible to remove 15,000 trees in Sharp Park "limb-by-limb?"
- > Nor is it believable that 18,500 trees will be taken down piecemeal over a long period of time. This would be both physically difficult and prohibitively expensive.
- > **Leaving "tree stumps and root balls intact" does not prevent erosion. There is considerable scientific evidence that erosion results when the roots die:**
 - "The immediate effect of deforestation is, therefore, favorable, but **adverse effects become evident when root systems decay** and when a drop in evapo-transpiration causes a rise in the ground water table." (Brown & Sheu 1975)
 - "Measurement of the decline in tensile strength of small roots in coastal British Columbia after death of the parent tree indicates that **over half the strength is lost within 3 to 5 years after cutting.**" (O'Loughlin 1974)
 - "**Soil strength increased linearly as root biomass increased. Forests clear-felled 3 years earlier contained about one-third of the root biomass of old growth forests.**" (Ziemer 1981)
 - "**Decay of tree roots subsequent to logging was found to cause a reduction in the shear strength of the soil-root system.**" (Wu, McKinnell & Swanston 1979)

The DEIR's assumption that increased run-off and erosion will not result from the implementation of SNRAMP does not take into account that **the potential for both run-off and erosion are significantly increased by the steepness of slope**. Some of the planned tree removals will occur in very steep terrain:

<i>Natural Area</i>	<i>MA</i>	<i>Tree Removals</i>	<i>% Trees Removed</i>	<i>%Slope*</i>
Interior Greenbelt	MA-2a	100	28%	67%
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	MA-2c	200	31%	33%-90%
	MA-2e	400	23%	20%-70%
Bayview Hill	MA-2a	70	32%	55.6%
* Determined by using topographical maps in SNRAMP for each natural area				

These are only examples of the steepness of slopes in many of the natural areas. The DEIR should be morally and legally obligated to evaluate the steepness of all of the natural areas in the context of the potential for increased run-off and erosion resulting from the removal of non-native trees.

The potential for increased run-off and erosion is greatly increased by steep slopes. The DEIR has not considered that many of the planned tree removals will occur in very steep locations. Some of these locations are directly uphill of densely populated residential neighborhoods which are in the direct path of both run-off and landslides caused by erosion. Yet, the risks to these residential neighborhoods have not been considered by the DEIR. The residential neighborhoods surrounding Mt. Davidson are particularly vulnerable to increased run-off, erosion and landslides.

On May 23, 2012, the State of California sued the US Army Corp of Engineers to challenge a national policy "requiring the removal of virtually all trees and shrubs on federal levees."⁴ Donald H. Gray, Professor of Civil and Environmental Engineering at the University of Michigan, explains why California is fighting this federal requirement in this summary of his literature search about the role trees play in stabilizing soil:

"In the long run, cutting of trees on slopes leads to a gradual decrease in mass stability as a result of the decay of roots which previously acted as tensile reinforcements on the slope. Root decay can also lead to the formation of pipes in slopes which promote internal or seepage erosion. The removal of tree canopy results in the loss of interception and evapo-transpiration which tends to promote wetter and less secure slopes. Canopy removal also results in less attenuation in the delivery rate of rainfall to the ground surface."⁵

The City and County of San Francisco should consider the implications of this suit. If the State of California is willing to sue to keep trees on its levees in order to prevent erosion and flooding, what are the prospects that the City and County of San Francisco can successfully defend itself against a legal challenge to its plans to remove 18,500 mature trees from the parks managed by the City of San Francisco?

The City and County of San Francisco is particularly vulnerable to legal challenges from the City of Pacifica regarding its plans for Sharp Park. SNRAMP plans the removal of over 15,000 trees over 15 feet tall in Sharp Park. In many management areas 75% of the trees will be removed. These trees will be replaced by dune scrub. The majority of these trees will be removed from the steep watershed at the eastern end of the park. The park slopes from 750 feet above sea level at its eastern end to sea level at its western end. The golf course, archery course, Laguna Salada, and horse pond are downstream from this steep watershed.

- > Tree removals will violate Pacifica's logging ordinance. The DEIR claims that the City of San Francisco is exempt from this law, but provides no explanation for or evidence to support this claim. The final EIR must explain why San Francisco is not subject to Pacifica's laws.
- > The final EIR must provide evidence that it is physically possible to remove tens of thousands of trees from a steep watershed without causing sedimentation, erosion, and landslides.
- > The final EIR must provide evidence that the endangered species that exist in Sharp Park will not be harmed by increased sedimentation, erosion, and landslides resulting from the removal of 75% of the trees in the watershed.

The final EIR must evaluate the risk of increased run-off, erosion and landslides. It must substantiate its baseless claims that the removal of thousands of trees will not increase this risk, using scientific studies. If the final EIR cannot provide scientific evidence that these tree removals will not increase these risks, it must mitigate these risks by decreasing plans for removal in natural areas where the risks are great because of steepness and/or the proximity of residential properties endangered by the tree removals.

Conclusion

The final EIR must correct the following errors of FACT in the DEIR:

- > The final EIR must evaluate the risk of increased run-off, erosion and landslides [SFFA-3-04]

■ 1. Potential for erosion/ flooding

During winter months, it is common for water to flow like small creeks down the mountain. Everyone we've talked to on our side of the street has had problems with water coming into homes or garages. We are very concerned about the potential for damage to our homes from erosion caused by the proposed removal of so many trees near our property. Who will be responsible for this damage?

Page 459 of the DEIR notes comments to the report regarding "Geology and Soils". Erosion effects are mentioned several times - and for good reason. Some smart person suggests "The need for a forester to evaluate the erosion impacts from cutting trees down." But the thoughtful comments are deemed "to have either no impact or less than a significant impact". Perhaps less than significant to the report writer, but in fact quite significant to residents like us in close proximity to Mt. Davidson.

Page 465 of the DEIR offers “a summary of the 1995 management plan’s general policies and management actions (SFRPD 1995).” Below header “Geotechnical/Soils” on page 466 is this bullet point:

- “Cooperate with adjacent property owners to minimize erosion and runoff issues.” This leads to our second issue. [Gomez-1-02]
- 3. And what about the risk of land/mud/rockslide after the trees are removed? [Johns-1-05]
 - Although there is Franciscan formation bedrock on Mt. Davidson, it is overlaid with many feet of topsoil which is held by eucalyptus tree root systems. Removing wide swaths of these trees could destroy that stability and cause landslides, imperiling houses downhill. [Thomas-1-02]
 - The NAP proposal acknowledges that erosion in the park properties endangers the public safety. Yet repeatedly, the NAP plans to remove non-native plants and trees that are proven superior to resist erosion and replace them with native plants. Native plants are inferior in resisting erosion. NAP planners are not deterred. Even worse, in Sharp Park, SFRPD intends to create a “Natural Area” in over 200 of the 400 acres there. Despite acknowledgement that there is a serious erosion problem within this park, the NAP states specifically it does not intend to address the erosion unless “capital funds are made available”. SFRPD intends to utilize capital funds to remove over 200 acres of healthy, non-native plants, remove 15,000 trees in Sharp Park and plant native plants throughout those 200 plus acres. However, SFRPD has no capital funds allocated to resolve a serious erosion problem which poses a significant public safety risk! [Valente-1-05]

Response GE-3

These comments indicate that run-off and erosion will not be prevented by revegetating areas with native species. These comments state leaving tree stumps in the ground will not prevent erosion; native plants will not revegetate quickly; and tree removals will increase runoff, particularly when they occur on steep slopes, and could result in erosion and landslides.

As stated on Draft EIR p. 459, Geology and Soils, existing conditions and impacts of the project were evaluated in the Initial Study, and the project was found to have either no impact or less than a significant impact for all of the significance criteria; this includes the criteria related to landslides. Further, the secondary impacts of erosion on water quality were evaluated in the Draft EIR in Impact HY-1 (on Draft pp. 364 and 365), and impacts were determined to be less-than-significant with implementation of Mitigation Measure M-HY-1, Implementation of Stormwater Pollution Prevention Measures, p. 366.

Erosion impacts are generally related to the removal of invasive species and the replacement with native species, are evaluated throughout Draft EIR in Section V.H, Hydrology and Water Quality. Erosion impacts are generally evaluated in Impacts HY-1, HY-2, HY-3, and HY-4 on Draft EIR pp. 366 to 373, and specifically evaluated on a programmatic and project basis in Impacts HY-7, HY-8, and HY-9. These sections conclude that impacts would be less than significant, largely because the

scope of the proposed activities is relatively small in scale and would be implemented over a 20-year timeframe. The SNRAMP identifies erosion control measures as part of the management actions within the Plan itself. Therefore, erosion control measures both are part of the Plan and are identified as a mitigation measure in the EIR.

Draft EIR Mitigation Measure M-HY-1, Implementation of Stormwater Pollution Prevention Measures, p. 366, which includes a series of erosion and sediment controls and other best management practices, mitigates potential water quality impacts that were identified in Impacts HY-7 and HY-9, which relate to restoration activities GR-12a (revegetate steep slopes) and GR-12b (phased invasive species removal to reduce erosion). Therefore, the DEIR concludes that large-scale programmatic tree removals could result in significant impacts to water quality and includes M-HY-1 to reduce these impacts to less than significant with mitigation.

BMPs identified in the SNRAMP include standard and proven methods taken from published BMP manuals such as the Caltrans Guidance for Temporary Soil Stabilization, the California Stormwater Quality Association Stormwater Best Management Practice Handbook, Construction, and the California Department of Fish and Wildlife Salmonid Stream Restoration Manual. The SNRAMP includes examples of relevant BMPs from these sources such as application of straw mulch, rolled erosion control products, wood mulch, silt fences, and fiber rolls. The capital expenditure to gradually increase and restore native vegetation in Sharp Park would include the cost of implementing erosion control measures. As discussed under Impact HY-15 on Draft EIR p. 379, restoration of Sharp Park would be undertaken in accordance with Draft EIR Mitigation Measure M-HY-1, Implementation of Stormwater Pollution Prevention Measures, p. 366, which requires extensive erosion and sediment control BMPs. In addition, Laguna Salada Restoration project would be undertaken in compliance with required permits from San Francisco Bay Regional Water Quality Control Board (SFBRWQCB), the CCC, and the USACE, which would include requirements to protect water quality, special-status species and sensitive habitats from impacts due to erosion and sedimentation; however, any forestry work (such as the removal of trees) may not be subject to the same permitting requirements. Also, the commenter cites the steepness of slopes as a factor in erosion, which is an existing condition and not something proposed as part of the project. The SNRAMP does not propose any grading activities. However, the BMPs employed for any given project undertaken pursuant to the SNRAMP would differ based on characteristics of the site, such as the steepness of the slopes, which may require implementation of numerous BMPs, whereas flatter areas may not require as many BMPs. As stated on Draft EIR p. 364, the specific erosion control measures to be implemented for each programmatic project would be in accordance with General Recommendations GR-12a (revegetate steep slopes) and GR-12b (phased invasive species removal to reduce erosion).

Refer to Response PD-25, RTC p. 4-201, for a discussion of the monitoring program designed to ensure the success of future restoration projects, which includes an adaptive management approach, as well as Response PD-31, RTC p. 4-206, and Response BI-33, RTC p. 4-457, for a discussion of the

success of past restoration projects. Lastly, refer to Response LU-1, RTC p. 4-213, for a discussion of the applicability of the Pacific Logging Ordinance and the San Mateo County Tree Ordinance with respect to the Sharp Park portion of the SNRAMP project.

4.D.12 Hydrology and Water Quality [HY]

The comments and corresponding responses in this section cover topics in Draft EIR Chapter V, Section V.H, Hydrology and Water Quality.

Comment HY-1 Drainage issues and downstream flooding from tree removal activities

The response to Comment HY-1 addresses all or part of the following individual comments:

SFPGA-3-01

Thomas-1-03

- Potential significant effect on the Sharp Park Golf Course of logging of approximately 15,000 eucalyptus trees at Sharp Park in the canyons to the east of the Coast Highway. We are concerned with potential significant adverse effects on drainage and downstream flooding, specifically flooding at the Sharp Park Golf Course and its surrounding residential neighborhoods - the Fairway Park and West Sharp Park neighborhoods of Pacifica -- arising out of the removal of significant numbers of mature eucalyptus trees (we understand that the SNRAMP goal is removal of 15,000 trees), and their replacement by native vegetation. The trees are on slopes within the Sanchez Creek watershed, which drains through the Sharp Park Golf Course. The golf course and its ponds and surrounding neighborhoods are already subject to winter flooding. Storm-relief pumping, to move excess storm water from Laguna Salada and Horse Stable Pond and their wetlands, is already constrained by concern for the effects of pumping on winter seasonal egg-laying by the California red-legged frog (CRLF). Therefore, there should be no logging if there is a possibility that erosion or any other effects of logging would result in any additional runoff to the golf course beyond current levels from the areas of Sharp Park to the east of the Coast Highway.

At page 376, the Draft EIR states – unconvincingly – that flooding will be “less than significant”:

“In Sharp Park removing eucalyptus trees in the upland area would increase incident rainfall that reaches the ground and could increase the rate of runoff into Sanchez Creek, the main drainage for this watershed. However, the increase is not expected to be substantial in comparison to the size of the drainage area and considering the normal range of runoff volume; additionally, the area would be revegetated following tree removal. Over time, the proposed project would reduce surface runoff by dispersing water more widely over the ground surface and slowing runoff velocities, thereby increasing infiltration. Therefore, the flooding impacts of the programmatic [tree removal] projects would be less than significant.” (Emphasis added)

But this is a non-answer. And it is not comforting. The assertion that “the increase [in rate of runoff into Sanchez Creek] is not expected to be substantial” is not supported by any

analysis. What does “over time” mean? When will the revegetation take place? And what will be the relative water absorption/transpiration ability of the replacement vegetation, as compared to the existing eucalyptus (which are known to have high water absorption capacity)? These questions are not answered. Since it takes only one heavy rainfall year--or week, for that matter--for the seriously damaging effects of flooding to occur, it is inappropriate to call the flooding effects “insubstantial,” when the duration and the extent of the acknowledged increased runoff vulnerability is unknown and unanalyzed by the DEIR.

In addition, the logging project will likely result in a substantial increase in erosion of surface soils, which will then be transported by Sanchez Creek downstream where they will settle in Laguna Salada, Horse Stable Pond, and the channel which connects the two. The ecological values and water capacity of these features is already seriously compromised due to siltation, which in fact is a principal reason for the ecological restoration proposed within the golf course. Without a detailed analysis of the erosion and siltation effects of the logging project, and detailed mitigation measures to prevent additional erosion and siltation, the logging project will both compromise the proposed ecological restoration project centered around Laguna Salada, and will increase flooding risk to the golf course and adjacent residential neighborhoods.

Therefore, rather than “insubstantial,” it would be more accurate to characterize the erosion, siltation and flooding risks as “substantial,” and then to analyze measures that might mitigate or eliminate these risks, such as: (1) helicopter logging to reduce the risk of erosion; (2) erosion-prevention measures; (3) timing of the logging and the native plant replanting so as to minimize the amount of time in which the ground is unprotected; and (4) interim measures to absorb water from the logging site, pending grow-in of the replacement native plants. Without these and other analyses, it is better to leave the existing eucalyptus groves in place than it would be to log the land and risk uncertain flooding risk to the historic golf course and its surrounding neighborhoods. [SFPGA-3-01]

- Existing underground springs could also be disrupted or re-routed. [Thomas-1-03]

Response HY-1

These comments express disagreement with the conclusions reached in the Draft EIR with respect to the potential for increased flooding to occur from large-scale programmatic tree removal projects at Sharp Park. These comments also suggest that the Draft EIR include mitigation measures to address the potential for downstream erosion and sedimentation of Sanchez Creek and suggest that underground springs or creeks could be disrupted by programmatic tree removal activities.

With respect to comments stating that the Draft EIR should include erosion control and sedimentation measures to protect Sanchez Creek, commenters are directed to Impact HY-1 (beginning on Draft EIR p. 364). As stated there, ground-disturbing activities could result in an increase in erosion and sediment to receiving waterbodies, which could have a significant impact on water quality. Based on this potentially significant impact, the Draft EIR includes Mitigation Measure M-HY-1, Implementation of Stormwater Pollution Prevention Measures, p. 366, to protect

water quality, which requires the SFRPD to implement applicable pollution avoidance measures, erosion and sediment controls, hazardous waste management, and post-construction BMPs, among other protection measures. For programmatic projects on one or more acres, the SFRPD would be required to obtain a NPDES General Permit for Stormwater Discharges Associated with Construction Activity from the SFBRWQCB. Under the General Permit, the SFRPD would be required to develop and implement a site-specific Stormwater Pollution Prevention Plan (SWPPP) that includes BMPs to prevent discharges of nonpoint source pollutants in construction-related stormwater runoff to storm drains and waterbodies. For projects less than one acre, Draft EIR Mitigation Measure M-HY-1, Implementation of Stormwater Pollution Prevention Measures, p. 366, identifies a list of requirements to reduce stormwater pollution. The specific requirements are detailed on Draft EIR pp. 366 to 369, and generally include measures to minimize the amount of disturbance; stabilize and revegetate all disturbed soils; install erosion and sediment control BMPs; perform basic housekeeping activities; implement waste management and hazardous materials pollutant controls; conduct routine inspections maintain or repair BMPs; and perform post-construction BMPs. While the proposed project does include erosion control BMPs, as detailed on Draft EIR pp. 93 to 94, the project would also be subject to Mitigation Measure M-HY-1, described above.

With implementation of Mitigation Measure M-HY-1, impacts to water quality were determined to be less than significant. In fact, many of the commenters suggested mitigation measures to reduce erosion and sedimentation described in Comment HY-1 have already been incorporated into the proposed project for large-scale tree removal activities, with the exception of using helicopters to remove trees. As described in the Draft EIR, and further below, SFRPD would employ limb-by-limb tree removal techniques. In areas where access impedes removal of tree trunks and branches by a flat-bed truck, trunks and branches would be left in place. Use of helicopters would not be a feasible mitigation measure due to the expense of such an operation and the additional environmental impacts that such a method could entail. Further, feasible mitigation has already been identified that would reduce the impact to a less-than-significant level.

Regarding the analysis of flooding impacts on Sanchez Creek from tree removal proposed at Sharp Park, large-scale tree removal activities are described on Draft EIR pp. 92 to 93 and 96. Large-scale tree removal activities are defined as exceeding one-half acre or more on average, or including removal of 20 or more trees at a time. Such removal activities would be conducted in accordance with the practices identified in SNRAMP Appendix F, Urban Forestry Statements. Accordingly, tree removal would either be done in groups or by selective thinning of specific trees. Group selection would remove a number of trees within a relatively small area ranging from 0.25 to 0.5 acre in size. Thinning could be conducted over a much larger area (several acres) and would include removal of smaller trees and saplings with some overstory. Group selection is intended to open up the overstory, while thinning would tend to keep most of the overstory intact, opening up the forest understory. As stated on Draft EIR p. 92, trees would be removed limb-by-limb, rather than by

felling whole trees (unless tree removal presents a safety concern which would require felling of the tree). Further, SFRPD would cut the trunk into individual sections, leaving the tree stump and rootball intact to hold the soil and minimize subsurface disturbance. SFRPD would spread tree removal across targeted portions of the Natural Areas and would not concentrate tree removal in any one particular location. The SNRAMP is a 20-year management plan for San Francisco's Natural Areas and, as such, the proposed activities would not occur all at once, but over time and in response to priorities identified by the SFRPD. Refer also to Response PD-20, RTC p. 4-192, for a discussion of future SFRPD activities pursued in furtherance of the SNRAMP.

As indicated in RTC Section 5.A, Changes in Response to Comments, the text on Draft EIR p. 376 (the Impact HY-10 discussion) has been changed for clarification regarding trees removal and flooding within Sharp Park, as follows:

There are no activities included in the project that would significantly alter the drainage pattern of the sites or that would substantially increase runoff such that flooding would occur, with the possible exception of ~~modifying the wetland complex in the proposed restoration activities at~~ Sharp Park, as discussed below.

Approximately 15,000 of the 54,000 existing eucalyptus trees in the Sharp Park MA-1 and MA-2 areas would be removed from select areas over time, during the 20-year lifetime of the SNRAMP, to restore native scrub habitats. The proposed tree removals are located on the east side of Highway 101 and are not located near, or part of, the Sharp Park Wetland Complex. Approximately 39,000 invasive trees, including scattered large individual trees, would remain in order to minimize large-scale disturbance and to promote a gradual conversion to native scrub habitat. No trees would be removed from the MA-3 areas at Sharp Park. Large-scale tree removal activities are described on EIR pages 92 to 93 and 96. As described, large-scale tree removal activities are defined as exceeding 0.5 acre or more on average, or including removal of 20 or more trees at a time. Such removal activities would be conducted in accordance with the practices identified in SNRAMP Appendix F, Urban Forestry Statements. Accordingly, tree removal would either be done in groups or by selective thinning of specific trees. Group selection would remove a number of trees within a relatively small area ranging from 0.25 to 0.5 acre in size. Thinning could be conducted over a much larger area (several acres) and would include removal of smaller trees and saplings with some overstory. Group selection is intended to open up the overstory, while thinning would tend to keep most of the overstory intact, opening up the forest understory. As stated on EIR page 92, trees would be removed limb-by-limb, rather than by felling whole trees (unless tree removal presents a safety concern, which would require felling of the tree). Further, SFRPD would cut the trunk into individual sections, leaving the tree stump and rootball intact to hold the soil and minimize subsurface disturbance. SFRPD would spread tree removal across targeted portions of the Natural Areas and would not concentrate it in any one particular location. The SNRAMP is a 20-year management plan for San Francisco's Natural Areas and, as such, the proposed activities would not occur all at once, but rather over time through the SNRAMP's 20-year management framework.

In addition, as described on EIR page 93, the SNRAMP proposes to use erosion control best management practices (BMPs), which would include use of the following techniques: straw mulch, rolled erosion control products, wood mulch, silt fences, fiber rolls, and straw bales. These erosion control measures would be employed until native vegetation was sufficiently established.

In Sharp Park, removing eucalyptus trees in the upland area would increase incidental rainfall that reaches the ground and could increase the rate of runoff into Sanchez Creek, the main drainage for this watershed. However, the increase is not expected to be substantial in comparison to the size of the drainage area and considering the normal range of runoff volume; additionally, SFRPD would employ low-impact tree removal techniques, remove trees gradually over the 20-year lifetime of the SNRAMP, employ erosion control BMPs and ~~the area would be revegetated~~ revegetate the area following tree removal. Over time, the proposed project would reduce surface runoff by dispersing water more widely over the ground surface and slowing runoff velocities, thereby increasing infiltration.

The rate of runoff from the watershed into Sanchez Creek involves several variables, including the capacity of soils to retain moisture, which is in turn a function of antecedent conditions, the permeability and thickness of the soils, the capacity of the bedrock aquifer to retain water, the slope of the area, the duration and intensity of the storm, the location of the rainfall within the watershed, and other geologic factors. The longer that the rainfall is retained in the upper portions of the watershed, and the more slowly it reaches the creek, the longer the creek can remain at a lower level without flooding. Vegetation cover can slow the rate of runoff, by capturing and retaining some of the rainfall on leaves and in the canopy, and by obstructing overland flow. Vegetation also helps to reduce erosion and retain soils, which in turn retain moisture. Slowing the rate of overland flow allows more time for infiltration of the rainfall into the soil and underlying aquifer. Groundwater flow is many times slower than overland flow.

In a large or intense storm event, however, the ability of water to percolate through soils and fractures in the underlying bedrock is quickly overcome and overland flow becomes the dominant mode of transport of the incident precipitation. The frequency of flooding events can be reduced through improved management of vegetation cover, but in a small, steep watershed such as that of Sanchez Creek, there is limited capacity for retention and large storm events will inevitably lead to downstream flooding despite improvements in vegetation management upstream. The proposed vegetation replacement and management program would be implemented gradually and is designed to retain ground cover with minimal impact on soil erosion, as described above. Unlike a commercial logging operation, which is designed to remove trees quickly at minimum cost, the vegetation replacement program would establish new vegetation cover to minimize the impact of tree removal.

Much of the flooding that occurs at the Sharp Park Golf Course is not the result of overland flow directly from upland areas, but is caused by waters rising in Laguna Salada because of limits on the pumping rate from Horse Stable Pond. Only larger, longer duration storms cause flooding in Laguna Salada, and because the watershed that drains into Sanchez Creek is much larger than the area affected by the project, the project is not expected to have any significant effect, either beneficial or adverse, on the frequency of flooding in Laguna Salada.

It should be noted that one of the functions of a stream is to transport sediment, and the gradient of a stream adjusts naturally to perform this function. Coastal streams in San Mateo County drain watersheds underlain by weathered and relatively soft and erodible deposits. The coastal hills are steep, and geologically recent, and normal erosion rates are high. The sediments that are carried from these watersheds supply a percentage of the sand that forms the many beaches that are found along the San Mateo County coast. This sediment transport is a natural process that has been impeded by the seawall at Sanchez Creek. Sediment that enters Horse Stable Pond has an opportunity to precipitate rather than be carried out to the ocean by the force of the stream. If an excessive amount of sediment were to be carried into Horse Stable Pond, it would reduce the capacity of the pond, but would not greatly impact the capacity of Laguna Salada.

In addition, to further address the potential reduction of capacity of the pond, the sediment basins would be regularly maintained, which would involve the periodic removal of accumulated sediment. Surveys would be coordinated with the USFWS and CDFG to ensure compliance with endangered species laws and regulations, and wetland functionality would be assessed using ecologically based criteria to determine success of the project objectives.

The SNRAMP includes erosion and sediment control BMPs to be implemented as part of the proposed tree removal and vegetation management activities, and the Sharp Park Restoration Project would be undertaken in compliance with required permits from SFBRWQCB, the CCC, and USACE, which would include additional requirements to protect water quality, special-status species and sensitive habitats from impacts due to erosion and sedimentation. As part of the Sharp Park restoration plan, SFRPD would remove accumulated sediment from Laguna Salada. SFRPD would also construct sediment basins to reduce sediment transport into Laguna Salada and Horse Stable Pond. Therefore, the flooding impacts of the programmatic projects would be *less than significant*. Accordingly, in compliance with CEQA Guidelines Section 15126.4, no mitigation measures are required to address flooding.

One of the commenters expressed concern that existing underground springs could be disrupted or re-routed. The proposed restoration activities would primarily include near-surface ground disturbance, with ground disturbance for trail maintenance and routine maintenance (e.g., weeding) six inches or less. While other activities could result in greater ground disturbance, such as planting, the disturbance of soils down to the groundwater is not anticipated. However, in some areas, ground disturbance to this level is intended. For example, at McLaren Park, Draft EIR p. 138 identifies Management Action MP-4a specifically intends to “Install spring boxes or small artificial pool habitats associated with springs and seeps to enhance amphibian habitat.” These activities, which could result in greater ground disturbance, have been analyzed in the Draft EIR, and impacts were found to be less than significant.

Comment HY-2	Sea level rise at Laguna Salada
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The response to Comment HY-2 addresses all or part of the following individual comments:

Sierra Club-1-13
Blum-1-04

Baye-1-08

Baye-1-09

■ **7. Climate Change and Sea-Level Rise need to be taken into consideration.**

Especially as the project is proposing major alternations to the hydrology of Laguna Salada, we believe more analysis is required to take into account the cumulative effects of global warming and sea-level rise. The proposed project seems to presume indefinite perpetuation of existing and past conditions. More precisely, the project seeks to maintain, through stabilization of the pumping regime, an artificial and below sea-level elevation of the Laguna Salada, corresponding approximately to what was the sea-level at the time of the original golf course construction in 1932. Further analysis of such an approach is needed in light of recent data on climate change and projected sea-level rise. At the very least, the Report should study the probable effects of overtopping in 10, 20, and 50 year storm events. Our main concern, in light of the reality of climate change, is that the current restoration plan will

lack any resiliency in the face of increased climate stress and inevitable sea-level rise. As indicated in the ESA report, a restoration plan which would allow the Laguna Salada wetland complex a buffer zone to retreat upland in the face of sea level rise has a better chance of succeeding in the long term than the current proposal, which will render the site extremely vulnerable to salt-water intrusion and overtopping, with potentially catastrophic consequences for the species. [Sierra Club-1-13]

- **1. Artificial pumping of Laguna Salada to achieve low water levels is highly likely to cause salinity intrusion and adverse wetland habitat conversion under a regime of accelerated sea level rise in the foreseeable future. Long-term enhancements options proposed by the report would likely fail in the long term because they ignore foreseeable long-term shifts in hydrologic baseline conditions.**

The report fails to identify the significant long-term constraints of "enhancing" non-tidal seepage lagoon wetlands that are artificially pumped to low water levels relative to sea level behind a permeable sand barrier. The inevitable physical consequences of pumping the lagoon levels near or below sea level are ignored in the report, despite the, clear, explicit, and professionally responsible warnings in its own hydrology report that salinity intrusion due to pumping may be occurring in summer even now, and may increase as sea level rises (Appendix A, pp. 22-23). The report's discussion of salinity intrusion (p. 23) does not represent the full scope of the hydrology report's findings, and is misleading.

The fundamental long-term problem of lagoon pumping reversing groundwater gradients behind the sand barrier, inducing seawater intrusion (Appendix A, p. 23), cannot be overestimated. The alternative report, however, essentially disregards it. None of the intended "enhancement" benefits to wildlife species are physically possible if the long-term effects of pumping, sea level rise, and evaporative concentration of lagoon water interact to convert the wetlands from fresh-brackish to brackish-saline or even hypersaline marsh. Following this first, fundamental misstep, the report's other long-term conclusions and recommendations about wetland enhancement are utterly unrealistic. The target species for "habitat enhancement" proposed are intolerant of persistently high salinity wetland conditions that would inevitably result from continued pumping of the lagoon to low levels as sea level rises.

The lagoon's long-term dynamic stability will require that freshwater lagoon levels rise and equilibrate with rising sea level, to maintain positive, seaward groundwater seepage gradients that maintain freshwater marsh. This fundamental physical constraint is nowhere considered in the main text of the conceptual enhancement plan.

It is distressing that the lead authors of the report either ignored or failed to comprehend fundamental wetland hydrology in "conceptual" habitat enhancement alternatives. [Baye-1-08]

■ **2. Reliance on maintenance and upgrading the "sea wall" is incompatible with long-term wetland management.**

All habitat enhancement alternatives assume perpetual maintenance and upgrading of the "sea wall" (rip-rap armored earthen berm capping the sand barrier beach), yet exclude highly significant environmental and economic impacts of this assumption. The report fails to address the inherently unstable long-term condition of the beach and "seawall", and the extreme coastal erosion hazard identified for Sharp Park by the U.S. Geological Survey (http://walrus.wr.usgs.gov/el_nino/SMCO-coast-erosion/04mori_e.html) and described with emphasis by Prof. Gary Griggs of U.C. Santa Cruz in his book, Living with the Changing California Coast (2003). The report fails to assess the long-term significance of the 1983 storm damage to the golf course and lagoon impacts as a constraint on long-term wetland management.

Again, basic coastal processes controlling lagoon wetland ecology are ignored in the conceptual alternatives report, which treats Laguna Salada as though it were a golf course pond at an inland location. As sea level rises, the beach shoreline necessarily retreats landward. If the beach is armored with boulders, shoreline retreat will steepen the shore profile and cause passive beach erosion, and eventual failure of the beach and collapse of the seawall, causing catastrophic flooding and sedimentation of the wetlands. Beach stabilization is infeasible and futile in the long term. Thus, the golf course that depends on artificial stabilization of the beach is also infeasible in the long-term. The report ignores enhancement alternatives that realign more efficient and cost-effective flood protection designs along borders of residential development, and eliminate costly and futile investment in the "emergency"-constructed (post-1983) seawall. Opportunities to utilize lagoon and riparian wetlands as beneficial flood and coastal storm buffers were ignored.

All coastal lagoons originate and are maintained by landward migration during sea level rise. The Laguna Salada wetland complex's long-term survival depends on planning for gradual landward migration of the barrier beach and its wetlands with rising sea level, which requires geomorphic accommodation space. That space is currently displaced by the golf course, built on filled riparian wetlands of the past - the historic freshwater end of the Laguna Salada wetland complex. Rising level and a static golf course together will inevitably squeeze the existing (reduced area of) fresh-brackish wetlands out of existence, regardless of ephemeral "habitat enhancement" plan actions.

It is not feasible to stabilize the lagoon wetlands in the reduced "footprint" of the 20th century lagoon as sea level rises over three to four feet in coming decades of the 21st century. Oceanic overwash processes during extreme storms must drive the beach and its lagoon wetland complex landward as sea level rises. Any long-term wetland management plan for a backbarrier lagoon must presume upward and landward displacement of existing lagoon wetlands over multiple decades. This lagoon accommodation space (location of historic freshwater riparian wetlands) is occupied by golf links that will be subject to adverse increases in flooding and coastal storm risks. [Baye-1-09]

- Some of the unresolved conflicts surrounding Sharp Park include failure to deal adequately with the science of climate change and sea rise, how such events will continue to further negatively affect the Sharp Park property, and what those costs will be [Blum-1-04]

Response HY-2

These comments express concern that the proposed Sharp Park Restoration Project may be affected by future sea level rise not addressed in the Draft EIR. The purpose of an EIR is to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment (PRC Section 21061). CEQA defines “environment” as the “physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, minerals, flora, fauna, noise, objects of historical or aesthetic significance” (PRC Section 21060.5). Furthermore, “... [an] EIR shall also analyze any significant environmental effects the project might cause by bringing development and people to the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impact of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas)” (CEQA Guidelines Section 151262). The above CEQA requirements are valid only to the extent that the project exacerbates the hazardous condition (*California Building Industry Association v. BAAQMD*, Alameda Superior Court Case No. RGI0548693).

The proposed Sharp Park Restoration Project is intended to restore the marsh complex and associated uplands to protect and enhance the California red-legged frog and San Francisco garter snake habitat; the project would not bring development to the wetland complex, or otherwise attract people to the restoration site. Therefore, the proposed project would not have the potential of attracting people to any existing or future hazardous conditions related to sea level rise.

Cumulative Sea Level Rise Effects

The Draft EIR does address the potential effects of climate change, including sea level rise, on the proposed project. Because global climate change is a cumulative impact (it is the result of impacts of past, present, and reasonably foreseeable projects on the environment), the secondary impacts of global climate change, including sea level rise are addressed in the cumulative impact discussion (Impact HY-16, Draft EIR pp. 380 to 382). Figure 7, Potential Sea Level Rise near Sharp Park, Draft EIR p. 359, illustrates the potential effects of sea level rise at Sharp Park. Draft EIR pp. 381 to 382 also analyze cumulative effects due to sea level rise; as indicated in RTC Section 5.A, Changes in Response to Comments, the text on Draft EIR p. 382 (beginning with the first full paragraph) has been changed to reflect the most current guidance relative to sea level rise analysis, as follows (the preceding paragraph, which starts on Draft EIR p. 381, is included for context):

During the 20-year project planning period for the project, the sea level is expected to rise less than one foot. Although sea level rise may continue over time, a sea level rise at India Basin Shoreline Park of less than one foot during the project's 20-year planning period is unlikely to result in significant flooding or salt water intrusion impacts. Similarly, a small rise in sea level is not expected to impact Balboa, which lies inland of the Ocean Beach seawall. An increase in sea level may lead to a rise in regional groundwater levels in the coastal aquifer. The elevation of Lake Merced would need to rise proportionally to maintain the existing hydraulic balance and barrier to salt water intrusion into the aquifer. There is adequate freeboard above the current lake elevation of Lake Merced to accommodate the anticipated rise in sea level without inducing flooding or increasing potential for salt water intrusion. At Sharp Park, sea level rise would increase the base level elevations of Laguna Salada and Horse Stable Pond. Fresh water must continue to discharge to the ocean underground, and in order for this to happen, the elevation of the water table would rise in proportion to the rise in sea level. The freshwater/saltwater interface, which is a zone of mixing, would move inland somewhat. Salinity in Laguna Salada may increase, especially during dry periods when outflow of fresh groundwater from the watershed above Sharp Park is lowest. The magnitude of sea level rise during the project planning period would probably be too small to result in significant erosion of the sea wall, but the effects are difficult to predict. Higher sea levels will result in faster erosion of the rocky headlands and would probably change the beach profile in front of the sea wall, which in turn may lead to erosion of the foot of the seawall, especially during the winter, when wave runup is greatest and beach sand is normally depleted.

Over a longer term, sea level rise is expected to continue, and could rise to levels that would cause significant impacts. The State of California Sea-Level Rise Guidance Document (most recently updated in March 2013)¹⁴³ provides the most current scientific data and guidance for agencies to consider and use during planning and decision making for projects in California. The document was prepared with the understanding that agencies will use the information in a flexible manner,

¹⁴³ Coastal and Ocean Working Group of the California Action Team with science support provided by the Ocean Protection Council's Science Advisory Team and the California Ocean Science Trust, State of California Sea-Level Rise Guidance Document, March 2013 Update. This document is available online at: http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwiN7ILh15bNAhVJ02MKHdcID_IQFggfMAA&url=http%3A%2F%2Fwww.opc.ca.gov%2Fwebmaster%2Fftp%2Fpdf%2Fdocs%2F2013_SLR_Guidance_Update_FINAL1.pdf&usg=AFQjCNEf_tyvfPAk598V6HaLMAkH0WC0MA&sig2=-MzpJagnGF89COfkEvk1xQ&bvm=bv.124088155,d.cGc, accessed on June 7, 2016.

taking into consideration risk tolerances, timeframes, economic considerations, adaptive capacities, legal requirements, and other relevant efforts. For projects in the City and County of San Francisco, sea level rise (or future flood risk) is evaluated on a project-by-project basis considering many of the factors affirmed in the Sea-Level Rise Guidance Document, such as the location of the project, the type of project being proposed, the potential risks to life or property, and adaptive design opportunities or constraints. Because these impacts would be experienced on a regional scale, the efforts to mitigate these impacts would be addressed through future projects on the regional scale.

Among the cumulative effects on water resources of sea level rise are increased frequency of flooding of low-lying areas, increased salt water intrusion in coastal wetlands, increased coastal erosion, and increased potential for contamination of receiving waters because of inundation of areas containing hazardous substances. One approach to mitigating these and similar long-term cumulative effects is to move vulnerable development and activities out of low-lying coastal areas and to encourage coastal and shoreline uses, such as open space, that can accommodate sea level rise. In general, Natural Areas are expected to have ~~low~~ less-than-significant impacts on water resources and therefore are not expected to contribute to the cumulative impacts on water quality that may result from sea level rise, resulting in a less than cumulatively considerable (less than significant) contribution to sea level rise impacts.

The CCC released a *Sea-Level Rise Policy Guidance, adopted on August 12, 2015*,¹⁴⁴ identifying principles to guide sea level rise adaptation efforts, many of which were derived directly from the requirements of the Coastal Act. These principles include (1) using science to guide decisions; (2) minimizing coastal hazards through planning and development standards; (3) maximizing protection of public access, recreation, and sensitive coastal resources; and (4) maximizing agency coordination and public participation. As these policies are finalized and/or other City, state, and/or federal guidelines become available, the SFRPD would incorporate any relevant measures into the SNRAMP.

Salinity Conditions with Sea Level Rise

As discussed on Draft EIR p. 382, it is expected that the stable fresh water elevation in Laguna Salada would rise in response to a rising sea level, since this is necessary to maintain a positive flow of groundwater to the ocean. This may lead to a number of changes over time, including increased salinity in Laguna Salada. Impact HY-16 (on Draft EIR pp. 381 and 382) addresses the cumulative impacts on salinity conditions with sea level rise and concludes that the proposed project is not expected to contribute in a cumulatively considerable way to any significant cumulative impacts on water resources and sea level rise.

While the specific effects of sea level rise on the Sharp Park Restoration Project are uncertain, because the effects of sea level rise are expected to occur gradually over time and because the SNRAMP proposes to employ an adaptive management approach, SFRPD would continue to evaluate the environmental conditions at Sharp Park and make management decisions in the future

¹⁴⁴ California Coastal Commission, *Sea-Level Rise Policy Guidance*, August 12, 2015. This document is available online at: <http://www.coastal.ca.gov/climate/slrguidance.html>, accessed on June 7, 2016.

based on those conditions. Although the Draft EIR concludes there could be significant impacts from sea level rise on the project, the proposed project would not result in a considerable contribution to the cumulative effects of climate change. The Draft EIR concludes that the proposed project would result in a less than cumulatively considerable contribution to sea level rise impacts. Further, the comments do not present substantial evidence that the proposed project would result in a cumulatively considerable impact with respect to sea level rise and, in the absence of any such substantial evidence, the Draft EIR is accurate in its conclusion.

Sea Level Rise and the Sea Wall

With respect to sea level rise, the seawall is part of the existing setting at the Sharp Park project site and is not proposed to be modified by the project. Thus, these comments do not address the adequacy or accuracy of the Draft EIR's analysis of the project or its impacts on the environment. For informational purposes, potential impacts to the seawall, which protects the area from the ocean, are described on Draft EIR p. 382, which states that "[t]he magnitude of sea level rise during the project planning period would probably be too small to result in significant erosion of the seawall, but the effects are difficult to predict." Draft EIR pp. 357 to 361 further address sea level rise with respect to the seawall. Draft EIR p. 361 specifically states that:

"Sea level rise will put additional stress on the seawall at Sharp Park and could result in more frequent overtopping (SFRPD 2009a). Rising sea levels will also result in higher groundwater levels near the coast, as the water table rises to maintain net groundwater outflow to the ocean. Higher groundwater levels will reduce storage capacity of Laguna Salada somewhat and will require more frequent or increased rates of pumping to maintain the water level in Laguna Salada below the elevation at which flooding impacts could occur.

The Sharp Park Seawall Evaluation (Arup 2009) summarizes the results of efforts to assess and rank the current condition of the seawall, evaluates performance in five years and under projected sea-level rise in years 2040, 2060, and 2100, and assesses salt water intrusion into the wetlands. During the site assessment, no signs of seawater penetration through the seawall were observed. However, elevated salinity levels and a seep have been reported near the western edge of Horse Stable Pond, at the southern end of the seawall. This is the location of an abandoned drainage pipe, and it is possible that seawater is seeping along the drainage pipe during high tides (Arup 2009).

While portions of the seawall are in fair to good condition, mainly in armored areas, there are other portions of the seawall that are in poor condition. Significant erosion rills, near-vertical slope faces, and beach sand within two feet of the seawall are all issues that negatively affect the condition of the wall. If improvements are not performed to alleviate these conditions, it is very likely that the seawall would be overtopped and breached during a 100-year storm or as a result of future sea level rise (Arup 2009)."

In December 2009, San Francisco Public Works commissioned a study, titled *Sharp Park Sea Wall Evaluation*,¹⁴⁵ which concluded that in the future, and not until year 2040, the seawall would be overtopped and breached as a result of sea level rise. The study also presented several recommendations for effective protection against overtopping and breaching. With respect to project-related sea level rise impacts, if the magnitude of sea level rise during the cumulative project planning period would not affect the seawall, it is similarly unlikely that sea level rise would affect the proposed project itself during the project horizon year.

With respect to alternatives to the seawall, as noted, the seawall is part of the existing conditions at the Sharp Park project site and the project does not propose any alteration to it. Draft EIR p. 363 states that “[w]hile the SFRPD has considered management options for the Sharp Park seawall, including a naturally managed seawall and shoreline, those options are not proposed as part of the SNRAMP and would require additional CEQA review before they could be implemented. As such, they are not addressed in this EIR.”

Refer to Response AL-11, RTC p. 4-600, for a discussion of lagoon water level management strategies and conditions.

Comment HY-3 Analysis of wetland hydrology, sediment and water quality, and dewatering activities

The response to Comment HY-3 addresses all or part of the following individual comment:

CCC-1-03

- The City’s environmental impact review should include data and analyses of coastal resource impacts associated with: a) sediment and water quality; b) wetland hydrology; and c) de-watering activities. Impacts should be evaluated for all phases of the proposed project, i.e., during construction and after construction. This information, additionally, will be needed for evaluation of the City’s CDP application. [CCC-1-03]

Response HY-3

This comment is specific to the project-level analysis of the Sharp Park Restoration Project.

The project-level analysis of the Sharp Park Restoration Project is included in the Draft EIR. As shown in Table 3 on Draft EIR p. 81, a coastal development permit would be required for the proposed Sharp Park Restoration Project. The CCC may require additional information as part of their review of the coastal development permit. The construction activities from this proposed project are described in detail in Draft EIR Chapter III, Project Description, pp. 97 to 104. As described and presented on Draft EIR pp. 356 to 357, existing hydrologic conditions and salinity levels were evaluated in the *Report for the Hydrologic Assessment and Ecological Enhancement Feasibility*

¹⁴⁵ Arup, *Sharp Park Sea Wall Evaluation*, December 2009.

*Study: Laguna Salada Wetland System*¹⁴⁶ and are presented in Draft EIR Section V.H.2, Environmental Setting, Hydrology and Water Quality. The Draft EIR evaluates both construction and post-construction impacts resulting from the Sharp Park Restoration Project. Impact HY-3 (Draft EIR pp. 370 to 372) addresses potential impacts to water quality (including the effects of dredging and dewatering activities) and determines that with implementation of Draft EIR Mitigation Measures M-HZ-13, Emergency Response Plan for Accidental Releases of Hazardous Materials, p. 395, and M-HY-1, Implementation of Stormwater Pollution Prevention Measures, p. 366, water quality impacts would be mitigated to less-than-significant levels. Impact HY-9, on Draft EIR pp. 375 to 376, addresses potential erosion and siltation impacts and determines that, with implementation of Mitigation Measure M-HY-1, impacts would be reduced to less-than-significant levels. Finally, the potential for the proposed project to result in significant impacts with respect to stormwater runoff quantity or quality is addressed in Impact HY-15 on Draft EIR pp. 379 to 380. This impact was also determined to be less than significant with mitigation.

Comment HY-4	Effects of Sharp Park Tree Removal Activities within the Coastal zone
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The response to Comment HY-4 addresses all or part of the following individual comment:

SFPGA-3-03

- But rather than cavil over the applicability of the local governmental ordinances, the issue is a substantive one of preventing activity (logging) on land outside the Coastal Zone from having potentially damaging results (flooding) on properties (historic golf course and residential neighborhoods) and natural resources (habitat of frogs and snakes) lying within the Coastal Zone. [SFPGA-3-03]

Response HY-4

This comment relates to the proposed tree removal activities at Sharp Park and the potential for those activities to result in downstream flooding of the golf course, nearby residences, and natural resources. As acknowledged on Draft EIR p. 377, under existing conditions, flooding of the Sharp Park Golf Course has been a recurring problem since the 1940s.

Horse Stable Pond is located south of Laguna Salada and consists of an open water pond and a fresh-to-brackish-water wetland. It is connected to Laguna Salada via an approximately 1,000-foot-long channel that was constructed to drain water from the lagoon to Horse Stable Pond, and together, these three features form a wetland complex. In addition to water from Laguna Salada, Horse Stable Pond receives water from Sanchez Creek from the east. Horse Stable Pond is shallower and smaller than Laguna Salada, and typical water depths range from one to three feet. Flood waters in the wetland complex are drained and removed by pumps located at the southwest corner

¹⁴⁶ Kamman Hydrology & Engineering, Inc., *Report for the Hydrologic Assessment and Ecological Enhancement Feasibility Study: Laguna Salada Wetland System, Pacifica, California*, March 30, 2009.

of Horse Stable Pond, which pump water into the Pacific Ocean during the winter, when water levels in the pond become too high.

The Laguna Salada wetland system is naturally maintained by groundwater during periods of low surface water inflow, such as during the summer. At these times, the water elevation in Horse Stable Pond and Laguna Salada represents the groundwater table. Groundwater and stormwater flow from the 845-acre watershed to the ocean maintain Horse Stable Pond elevations above sea level. Over the course of the year, however, surface inflows to Laguna Salada exceeds groundwater inflows to Laguna Salada by 600 percent. Some of the excess surface water inflow is lost to evaporation and uptake by plants, some flows as groundwater to the sea, and some is pumped to the ocean during periods of high inflow.

Draft EIR p. 376 addresses the potential for programmatic tree removal activities to increase the rate of runoff of Sanchez Creek and determines that the potential for increased downstream flooding as a result of tree removal activities would not be substantial and found this impact to be less than significant. The commenter is directed to Response HY-1, RTC p. 4-486, which provides additional details as to how this determination was made. Because the increase in runoff from proposed tree removal activities would not be substantial, it would not result in potential secondary impacts to San Francisco garter snake and California red-legged frog habitats. Further, as stated on Draft EIR p. 146, the SFRPD would continue to use pumps to manage water levels in Horse Stable Pond to conserve the California red-legged frog by conducting post-rainfall inspections of the pond for California red-legged frog egg masses and making any pumping changes necessary to prevent stranding and other impacts to egg masses, if found to be present. The comments above are general in nature and do not present substantial evidence that the proposed project would result in significant impacts with respect to downstream flooding.

Comment HY-5	Dredging Impacts on Water Quality (Salinity Assessment, Water Budget Model, and Storm Response Modeling)
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The response to Comment HY-5 addresses all or part of the following individual comment:

Baye-1-03

- The DEIR also misinterprets its own hydrologic analysis report (Appendix A) in arguing that the project will not cause a change in salinity or salinity stratification within the lagoon after dredging. The DEIR correctly reports that the existing condition of the lagoon's continuous open-water area is relatively well-mixed salinity, with little stratification. The scope of the KHE hydrology report did not include any analysis or discussion of the effects of either localized dredging (dredge-deepened pockets, heterogeneous bed depths) or widespread dredging (deeper homogeneous depths) on salinity stratification or salinity intrusion cumulative impacts with sea level rise, and do not support the arguments of "no significant cumulative impact" (p. 380) in the DEIR. The hydrology report explicitly states that the purpose of the salinity assessment was limited to assess salinity and groundwater

interactions, specifically for the potential for salinity intrusion under existing conditions, using a mass balance approach:

... developed to test the hypothesis that the seasonal change in salinity was affected by shallow groundwater conditions. Given its location along the coastline, there is the potential for seawater intrusion to increase salinity and alter the habitat conditions of the system. (Appendix A, p. 18)

The hydrology report's scope did not include analysis of did not analyze interactions or cumulative impacts of dredge-modified lagoon bathymetry and sea level rise, but it did advise – contrary to the DEIR's conclusion of "no significant cumulative impact" of the project water quality (p. 381-382) – that rising sea level may increase long-term salinity intrusion into the lagoon under its existing regime of artificially low water surface levels maintained by pumping:

Sea level rise and climate change may also alter seasonal and long-term ocean levels and wave energy, potentially reversing shallow groundwater gradients between the lagoon and ocean and allowing more salts to migrate into the Laguna. The existing salinity and water budget models will prove to be useful tools in evaluating and quantifying potential benefits and impacts to wetlands under proposed enhancement plan alternatives. (Appendix A, p. 23; emphasis added in underline)

Unfortunately, The DEIR subsequently failed to apply the useful salinity and water budget model tools in subsequent analysis of benefits and impacts of the project on water quality. It provided absolutely no analysis or assessment of how dredging up to 60,000 cubic yards of sediment from the lagoon, deepening it up to several feet, would affect the stratification and trapping of high salinity pulses during salinity intrusion or storm overwash events. Salinity stratification should be predicted to increase with increased bottom relief and depth in the lagoon, since higher salinity water is denser than fresh or slightly brackish water, and local depressions would be less subject to mixing due to wind-stress current circulation in the lagoon than the existing nearly flat bed. Local dredge-deepened depressions in the lagoon would also be expected to trap fine organic sediments and have elevated water temperature due to the higher specific heat of more saline stratified water. Elevated temperatures, salinity, and organic matter in deeper depressions would be expected to increase anoxia (and hydrogen sulfide and methane gas production). The DEIR cannot cite Appendix A to address these issues because they were not within the scope of the report. These are potentially significant cumulative water quality impacts and impacts on wetland-dependent endangered species that are not assessed in the DEIR.

The DEIR also cannot rely on the findings of the original Laguna Salada conceptual restoration plan (Tetra Tech 2009) for analysis of sediment and water quality impacts of lagoon dredging because that report also failed to provide sediment testing data or impact analysis of dredging anoxic sulfidic sediments in the closed lagoon. In fact, it failed even to identify the potentially huge biogeochemical and water quality impacts of dredging and draining the lagoon. This study considered sediment quality impacts and suitability only from the perspective of re-using dredge spoils for placement on the golf course greens (Tetra

Tech 2009, p. 39). Moreover, the City failed to provide sediment or water quality monitoring data from recent "maintenance" dredging episodes of small-scale Horse Stable Pond to elucidate these potential dredging-induced water quality impacts at a larger scale, commensurate with the proposed 60,000 cubic yard dredging proposal.

These omissions of sediment quality assessment for primary restoration methods that rely exclusively on dredging are unreasonable, because:

- > the aquatic habitat impacts of disturbing sulfidic anoxic coastal wetland sediments (including acid sulfate soil development) have been studied worldwide for decades, and are well-known in wetland ecology (e.g., Portnoy 1991, and references within)
- > Pre-dredging sediment testing is routinely required by state and federal regulatory agencies, particularly in aquatic habitats that support endangered species, so it should have been presumed to be necessary for a meaningful CEQA analysis of impacts and alternatives in an EIR;
- > The San Francisco Recreation and Parks Department was notified in 2009 of this deficiency in analysis of anoxic sulfidic sediments proposed for dredging (see attached comment letter on the Sharp Park Conceptual Restoration Alternatives Report (Tetra Tech et al. 2009).

4. Summary of CEQA deficiencies and recommendations for remedies.

In summary, the DEIR:

- > fails to address significant potential cumulative impacts between dredging, salinity stratification, seawater intrusion, and sea level rise within the 20 year planning period. [Baye-1-03]

Response HY-5

This comment relates to dredging impacts on sediment and water quality, stating that salinity and water budget modeling tools were not applied, nor was there an assessment of cumulative impacts related to dredging, salinity stratification, seawater intrusion, and sea level rise.

Dredging Impacts on Water Quality (Salinity Assessment, Water Budget Model, and Storm Response Modeling)

Impact HY-3 specifically addresses the potential impacts of the Sharp Park restoration component of the SNRAMP, including dredging 60,000 cubic yards of sediment, on water quality. Also, as reflected in the *Report for the Hydrologic Assessment and Ecological Enhancement Feasibility Study: Laguna Salada Wetland System, Pacifica, California*,¹⁴⁷ a salinity assessment was completed to characterize existing conditions and to assess potential impacts associated with saltwater encroachment. Given its location along the coastline, there is the potential for seawater intrusion to

¹⁴⁷ Kamman Hydrology & Engineering, Inc., *Report for the Hydrologic Assessment and Ecological Enhancement Feasibility Study: Laguna Salada Wetland System, Pacifica, California*, March 30, 2009.

increase salinity and alter the habitat conditions of the system. Salinity is expected to increase during the summer when evapotranspiration decreases the volume of water in storage and thus increases the concentration of dissolved salts. If the seasonal variability of salinity is controlled by evapotranspiration, then the overall mass of dissolved salts should remain stable throughout the year even though the concentration may fluctuate. If, however, relatively saline water is being added to the pond during a portion of the year, the mass of dissolved salts in the system could increase over time.

Observations from April 2008 to February 2009, as contained in the *Report for the Hydrologic Assessment and Ecological Enhancement Feasibility Study: Laguna Salada Wetland System, Pacifica, California*, suggest that groundwater contributions led to small increases in the total mass of dissolved salts in the pond/wetland system. Overall, salinity observations from the open water ponds were not significantly higher than the observations from 1990 to 1991. It is likely that a high turnover rate associated with high inflows of surface runoff and shallow groundwater from the east continue to flush the system and maintain the slightly brackish condition. The impact of shallow groundwater contributions to the salinity budget does not appear to be producing any long-term trends. Further, water and salt budget analyses indicate that the maximum salinity of groundwater inflow to Laguna Salada did not exceed a salinity concentration of 2.5 parts per trillion (ppt) during the 2008–2009 monitoring period (and was probably much lower), indicating seawater intrusion was not a significant factor to the lagoon's salinity during the monitoring period. Also, refer to Response AL-11, RTC p. 4-600, for further evidence that increasing the system's storage capacity through extensive dredging would not result in diminished water levels or compromised water quality (including salinity levels).

An analytical water budget model (also provided in the *Report for the Hydrologic Assessment and Ecological Enhancement Feasibility Study: Laguna Salada Wetland System, Pacifica, California*) was developed to evaluate the seasonal and inter-annual variability of hydrologic conditions. The primary inflow components that were modeled include direct precipitation, surface water inflow, and groundwater inflow, and the primary outflow components that were modeled include surface water outflow (discharge from the pump station) and evapotranspiration. Results from the water balance simulations show that the variation of water year types does not affect the annual change in the volume of water stored in the wetlands, and that adequate water is supplied to the system to maintain the open-water ponds during the dry years. Inter-annual variability of water levels in the wetlands is low due to the operation of the pumping station.

A storm response modeling system was developed (and described in the *Report for the Hydrologic Assessment and Ecological Enhancement Feasibility Study: Laguna Salada Wetland System, Pacifica, California*) to simulate the water level response to winter storm runoff entering the Laguna Salada wetland complex, integrating the rainfall-runoff, flood routing, and pond storage characteristics of the system. Findings from the modeling investigation present the water level responses to a range of designed storm events based on existing conditions at the site to improve the understanding of the

hydrologic processes that affect the distribution of ecological habitats in the Laguna Salada wetland system and flooding of the adjacent golf course.

The salinity assessment, water budget model, and storm response modeling efforts that were completed for this project provide highly-detailed analytical tools that can also be utilized in future design work relative to potential flood hazard impacts. However, in terms of the EIR analysis, sufficient detail was provided, through all of the data referenced in the Draft EIR (in Section VIII), to address the commenter's concern that the Draft EIR "fails to address significant potential cumulative impacts between dredging, salinity stratification, seawater intrusion, and sea level rise within the 20 year planning period." In fact, Draft EIR pp. 380 to 382 presents a cumulative analysis of these issues, ultimately concluding that:

"Among the cumulative effects on water resources of sea level rise are increased frequency of flooding of low-lying areas, increased salt water intrusion in coastal wetlands, increased coastal erosion, and increased potential for contamination of receiving waters because of inundation of areas containing hazardous substances. One approach to mitigating these and similar long-term cumulative effects is to move vulnerable development and activities out of low-lying coastal areas and to encourage coastal and shoreline uses, such as open space, that can accommodate sea level rise. In general, Natural Areas are expected to have low impacts on water resources and therefore are not expected to contribute to the cumulative impacts on water quality that may result from sea level rise, resulting in a less than cumulatively considerable (*less than significant*) contribution to sea level rise impacts."

Refer to Response BI-7, RTC p. 4-365, for a discussion of the proposed dredging activities on sediment and water quality, including the degree to which acid sulfate soil conditions (or anoxic sulfidic sediments) could impact aquatic habitats, and to Response HY-2, RTC p. 4-493, for a discussion of cumulative salinity and sea level rise impacts.

Comment HY-6 Practices contributing to algal blooms

The response to Comment HY-6 addresses all or part of the following individual comment:

Bartley-1-10

- Dumping green waste along the sides of the lake causes algal blooms due to the increased nitrogen. Same goes for fertilizers on the golf courses – both practices should end. [Bartley-1-10]

Response HY-6

This comment requests that depositing green waste along the sides of the lake and the use of fertilizers on the golf course should end.

As a matter of practice, the SFRPD does not deposit green waste along the side of any waterbodies or watercourses under its control. In one instance, mulch was placed by SFRPD operations in a gully

around Lake Merced in an effort to control erosion; however, as previously mentioned, the use of mulch in this way is not a standard practice and is not included as part of the proposed project. Also, ongoing golf course operations, such as the use of fertilizers, are part of ongoing golf course operations and are not related to the proposed project. The Draft EIR evaluates the impacts of the proposed project; therefore, neither past incidences nor current golf course operations are evaluated as part of the Draft EIR, except, where appropriate, in the cumulative impacts context.

However, the SNRAMP acknowledges that the use of pesticides, herbicides, and fertilizers at the golf course could have an impact on water quality within Laguna Salada and a corresponding effect on sensitive species that use this area. While SNRAMP Recommendation SP-5a indicates that the Integrated Pest Management and NAP staff shall work with the golf course operations staff to reduce the use of chemicals to the bare minimum, recognizing that alternative management methods may be more environmentally appropriate for this location (refer specifically to MA-1d to MA-1f of the SNRAMP), the Biological Opinion for the Sharp Park Safety, Infrastructure Improvement, and Habitat Enhancement Project (on p. 8) states that “only organic fertilizers are used at Sharp Park and only on the greens, tees and surrounds.” Consistent with the Biological Opinion, and as indicated in Response BI-10, RTC p. 4-384, nitrogen- and phosphorous-based fertilizers are not currently used at Sharp Park, and have not been used there for at least five years.

4.D.13 Hazards and Hazardous Materials [HZ]

The comments and corresponding responses in this section cover topics in Draft EIR Chapter V, Section V.I, Hazards and Hazardous Materials.

Comment HZ-1	Use of herbicides/pesticides by the Natural Areas Program
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The response to Comment HZ-1 addresses all or part of the following individual comments:

CFDG-1-09	DogPACSF-1-02	DogPACSF-1-12
MPIC-2-23	MPIC-2-24	MPIC-2-25
MPIC-2-26	SFDOG-2-13	SFFA-3-07
SFFA-3-08	SFFA-3-09	SFFA-3-10
SFFA-3-11	WTPCC-1-04	WTPCC-1-05
WTPCC-1-06	Bartolotta-1-11	Bose-1-03
Bose-1-12	Bose-1-13	Bowman-1-03
Bowman-1-11	Bowman-2-10	Brown-1-09
Butler-1-03	Hess-1-06	Hull-1-02
Johns-1-03	Johns-1-07	Kessler-1-04
Kessler-1-05	Kessler-1-06	Kessler-1-07
Kessler-1-08	Kessler-2-04	Kessler-2-05
Kessler-2-06	Kessler-2-07	Kessler-2-08
Mattingly-1-02	McAllister-3-04	McAllister-3-05
McAllister-3-06	McAllister-3-07	Milstein-1-01

Otto-1-01	Otto-1-02	Otto-1-03
Pittin-1-02	Reichardt-1-03	Risk-1-05
Schlund-1-02	Thomas-1-01	Thomas-1-05
Valente-1-02	Valente-1-03	Vitulano-1-05
PH-Rotter-P-03		

- This EIR does not adequately consider the impacts of the use of herbicides, especially Garlon, on dogs who walk either within or adjacent to natural areas (this applies whether dogs are on- or off-leash). Dogs are particularly susceptible to problems from Garlon. This distinction is not made and the analysis of impacts from herbicides must be redone to reflect this. [CFDG-1-09]
- Additionally, recent reports of Monsanto's Round Up herbicides and other chemicals that are not only harmful to dogs but the general animal population in the park is untenable. [DogPACSF-1-02]
- The NAP EIR does not adequately consider the impacts of the use of herbicides, especially Garlon, on dogs who walk either within or adjacent to natural areas (this applies whether the dog is on- or off-leash). In a paper on the effects of Garlon, the Marin Municipal Water District (http://www.marinwater.org/documents/Chap4_Triclopyr_8_27_08.pdf) notes that Garlon can cause kidney problems in dogs because of their limited physiological ability to excrete weak acids such as those in Garlon in their urine (they are somewhat unique among mammals in this). The NAP's reliance on herbicides to speed the removal of non-native plants in natural areas will have a negative impact on the health of dogs walked where it has been applied. This is especially true in Glen Canyon, where Garlon was applied over 30 separate times last year. This impact was not considered in the Hazards and Hazardous Materials section of the NAP EIR and a discussion of the health impacts on dogs of repeated exposure to Garlon should be included. [DogPACSF-1-12] [Bartolotta-1-11] [Brown-1-09]
- The NAP EIR does not adequately consider the impacts of the use of herbicides, especially Garlon, on dogs who walk either within or adjacent to natural areas (this applies whether the dog is walked on- or off-leash). In a paper on the effects of Garlon, the Main Municipal Water District (<http://ww.maritiwater.ordocumentsChap4Friclopr82708.pdt>) notes that Garlon can cause kidney problems in dogs because of their limited physiological ability to excrete weak acids such as those in Garlon in their urine (they are somewhat unique among mammals in this inability). The NAP's reliance on repeated use of herbicides to speed the removal of non-native plants in natural areas will have a negative impact on the health of dogs walked where it is applied. This is especially true in Glen Canyon, where NAP sprays Garlon in places where children, seniors and dogs walk regularly. In addition, there is concern that the coyotes who make Glen Canyon their home may have similar kidney problems from exposure to Garlon (indeed their exposure would likely be higher than for dogs because they cannot read the signs that tell people to stay out of areas when pesticides are applied and so will walk through these areas soon after applications). The health impact on dogs of repeated exposure to Garlon was not considered in the Hazards and Hazardous Materials section and should be included. [SFDOG-2-13]

■ **VII. Pesticides and Herbicides**

The DEIR for the SNRAMP claims that herbicides/pesticides required to implement SNRAMP will not have a significant impact on the environment. It reaches that conclusion by providing inadequate and inaccurate information about the use of herbicides by the NAP in the present and by providing no information about the requirements for more herbicides in the future to kill the roots of thousands of trees that will be destroyed:

- > The DEIR provides no information about the frequency of use of herbicides by the NAP.
- > The DEIR claims that herbicide applications by the NAP comply with San Francisco’s Integrated Pest Management (IPM) Ordinance. In fact, public record contain considerable evidence that herbicide applications by the NAP frequently violate San Francisco’s IPM Ordinance.
- > The DEIR misstates the facts about the toxicity of the herbicides being used by the NAP.
- > The DEIR provides no information about the increased use of herbicides that will be required to prevent the resprouting of the trees that will be destroyed by the implementation of SNRAMP.

Herbicide use by the NAP

The DEIR provides no information about the volume of herbicides used by the NAP. The sole sentence in the DEIR pertaining to volume of use of herbicides is this: “In 2004, the Natural Areas Program accounted for less than 10 percent of the overall SFRPD pesticide use, even though the Natural Areas account for approximately 25% of the land managed by the SFRPD.” (DEIR, page 365) This statement provides inadequate information regarding NAP’s pesticide use because it is 8 years out of date. Because we aren’t informed by the DEIR of the volume of SFRPD’s pesticide use, we are unable to determine the volume of NAP’s pesticide use, i.e., NAP’s pesticide use is 10% of WHAT?

The claim that NAP’s pesticide use is only 10% of total RRPD pesticide use – if in fact that is true – is not reassuring. The public has good reason to expect that parks designated as “natural areas” should contain less pesticide than other park areas, such as golf courses, lawns, flower gardens, and landscaped areas.

Based on public records requests (see Attachment A), we have the following information about the number of pesticide applications by the NAP:

Number of Pesticide Applications by the Natural Areas Program

<i>Active Ingredient</i>	<i>Year</i>			<i>Increase from 2008 to 2010</i>
	<i>2008</i>	<i>2009</i>	<i>2010</i>	
Triclopyr (Garlon)	17	16	36	212%
Glyphosate (Roundup)	7	6	31	443%
Aminopyralid/Imazapyr	2	2	2	0%
Total	26	24	69	265%

We learn from these official reports of NAP's pesticide use, which are required by the City's IPM Ordinance, that NAP's pesticide use has increased 265% since 2008. Therefore, the only information provided by the DEIR regarding NAP's pesticide use is inadequate and inaccurate because it is 8 years old and pesticide use by the NAP is increasing significantly from year to year, 265% in the past 3 years alone.

From these official reports of NAP's pesticide use it is evident that several other statements in the DEIR are inaccurate. The DEIR claims that "Garlon is being phased out from use in Natural Areas and is only used for invasive plants in biologically diverse grasslands due to its target specificity." (DEIR, page 365) However, according to the official reports of NAP's pesticide use, Garlon (active ingredient Triclopyr) was used more often than any other pesticide in all 3 years, including the most recent year. This FACT is inconsistent with a claim that Garlon is being "phased out."

The statement that Garlon is "only used for invasive plants in...grasslands" is contradicted by this statement in the DEIR: "Treatment of tree stumps with San Francisco-approved herbicides (such as Roundup and Garlon) (DEIR, page 386) The DEIR claims that Glyphosate is the "primary product used." (DEIR, page 365). This statement is inaccurate. Official reports of NAP's pesticide use prove that Triclopyr was used more often than Glyphosate in all 3 years for which we have data.

The final Environmental Impact Report for the SNRAMP must:

- > Provide specific and current data about herbicide use by the NAP

If this information is provided in the final EIR it will be unlikely that the EIR could make a believable claim that there will be no significant impact on the environment resulting from the implementation of the SNRAMP. The animals that live in our parks and the humans who visit them deserve the mitigation required to ensure their health and safety. Furthermore, CEQA law requires such mitigation. [MPIC-2-23]

- **Herbicide use by the Natural Areas Program frequently violates San Francisco's IPM Ordinance**

In lieu of providing any information about the actual use of pesticides by the Natural Areas Program, the DEIR claims that the mere fact that these pesticide applications comply with San Francisco's IPM Ordinance ensures that there will be no significant impact on the environment from its pesticide use: "Pesticide use...would adhere to the IPM Program. As a result, water quality impacts from herbicide and pesticide use as part of programmatic projects would be less than significant." (DEIR, page 365)

There are two problems with this claim:

NAP has been granted exceptions to the IPM Ordinance to use toxic chemicals that are not used by other agencies in San Francisco: Imazapyr and Triclopyr.

- > Garlon (Triclopyr): Tier I, Most Hazardous. Use Limitation: "Use only for targeted treatments of high profile or highly invasive exotics via dabbing or injections. May use for targeted spraying only when dabbing or injections are not feasible and only with use

of a respirator. HIGH PRIORITY TO FIND ALTERNATIVE.” (San Francisco IPM policy 2011)

- > Habitat (Imazapyr): Tier II, More Hazardous. Use Limitation: “Preferred alternative to triclopyr for use on invasive weeds in natural areas such as broom, cotoneaster, or Arundo grass.” (San Francisco IPM policy 2011)
- > Even after having been granted these exceptions, NAP has frequently violated the IPM Ordinance. Many of these violations have been reported to the Department of the Environment by the public and are therefore a part of the public record:
- > NAP’s reports of pesticide use are frequently incomplete: targets for applications, locations of applications, etc., are frequently missing from NAP’s reports (see Attachment A).
- > We have photographs of notices of pesticide applications for which there are no corresponding entries on the official record of pesticide use maintained by the Department of the Environment. This suggests that the official reports of NAP’s pesticide use are not complete. These photographs have been sent to the Department of the Environment.
- > The NAP’s notices of pesticide application are frequently missing the date of application, thereby making it impossible for the public to know when the area is safe to enter. Photographs of these incomplete notices have been sent to the Department of the Environment.
- > The NAP used Imazapyr in 2008 and 2009, prior to its approval for use by San Francisco’s IPM policy in 2011.
- > The NAP **sprayed** Garlon (Triclopyr) prior to 2011 when only “dabbing and injection” were approved application methods by the IPM policy.
- > The NAP sprayed Garlon (Triclopyr) in 2011 without using a respirator, as required by the IPM Ordinance in 2011 (see Attachment B).
- > The NAP sprayed herbicides containing glyphosate in the water of Lake Merced, which is officially designated red-legged frog habitat, in violation of US Fish and Wildlife regulations which ban the use of many herbicides, including glyphosate, from designated habitat for red-legged frogs and other endangered amphibians.
- > Volunteers working in the natural areas are not authorized to use herbicides because they have not been trained and do not have the proper equipment with which to safely apply herbicides. Some of these unauthorized volunteers have been seen spraying herbicides without posting the required notification of pesticide application. These incidents have been reported to the Department of the Environment.

The final Environmental Impact Report for the SNRAMP must:

- > Provide accurate information about the toxicity of the herbicides being used by the NAP

If this information is provided in the final EIR it will be unlikely that the EIR could make a believable claim that there will be no significant impact on the environment resulting from the implementation of the SNRAMP. The animals that live in our parks and the humans who visit them deserve the mitigation required to ensure their health and safety. Furthermore, CEQA law requires such mitigation. [MPIC-2-24]

- The DEIR makes inaccurate statements regarding the toxicity of the pesticides used by the Natural Areas Program.

The DEIR contains little information regarding the toxicity of the pesticides being used by the Natural Areas Program. What little information it provides is entirely inaccurate, e.g.: “*Garlon+ degrades quickly in the environment and has low toxicity to aquatic species (Dow, 2009).” (DEIR, page 365)

Following are accurate statements regarding Garlon’s biodegradability and toxicity to aquatic life quoted directly from the Material Safety Data Sheet mandated by the federal government and prepared by the manufacturer of the product (Dow) based on laboratory studies conducted by the Environmental Protection Agency also mandated by federal law (see Attachment C):

- > “Persistence and Degradability: Chemical degradation (hydrolysis) is expected in the environment. **Material is expected to biodegrade only very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.**” (emphasis added)
- > “Ecotoxicity: **Material is highly toxic to aquatic organisms** on an acute basis...” (emphasis added)

The DEIR’s flagrant misrepresentation of the toxicity of Garlon is appalling. The DEIR contains no accurate information about the toxicity of any of the pesticides used by the NAP. In the only case in which it provides any information, this information is completely inaccurate.

The final Environmental Impact Report for the SNRAMP must:

- > Quantify, evaluate, and mitigate the increased herbicide use that will be required as a result of destroying thousands of trees that will re-sprout unless their stumps are treated with pesticides.

If this information is provided in the final EIR it will be unlikely that the EIR could make a believable claim that there will be no significant impact on the environment resulting from the implementation of the SNRAMP. The animals that live in our parks and the humans who visit them deserve the mitigation required to ensure their health and safety. Furthermore, CEQA law requires such mitigation. [MPIC-2-25]

- The DEIR provides no information about the increased use of pesticides that will be required to implement the SNRAMP

The DEIR’s claim that the NAP’s herbicide use will have no significant impact on the environment is apparently based on historic data from 2004 (which the DEIR does not share

with the reader) and on an assumption that historic use was in compliance with San Francisco's IPM Ordinance. As we have shown, data from 2004 does not describe NAP's present use, NAP is granted exceptions for most of its pesticide use, and NAP has a substantial public record of violating IPM policy.

However, the DEIR is supposed to evaluate the environmental impacts of implementing the SNRAMP. It is therefore obligated to look forward, not backward. The DEIR says nothing about NAP's use of herbicides in the future as a result of the implementation of the SNRAMP. This is a very important failing, because destroying thousands of trees will require the use of more pesticides. Most of the non-native trees destroyed will re-sprout if their trunks are not sprayed immediately with Garlon. This initial application of Garlon is often insufficient to kill the roots of the tree. Repeated applications are often required to kill the roots of the tree.

The DEIR acknowledges the need to use Garlon on the stumps of trees that have been destroyed: "Treatment of tree stumps with San Francisco-approved pesticides (such as Roundup and Garlon)" (DEIR, page 386) However, the DEIR provides no information about how much more pesticide must be used as a result of destroying thousands of non-native trees. UC Berkeley has been clear-cutting all non-native trees from its properties for over 10 years. Several years ago it applied for grant funding from the Federal Emergency Management Agency (FEMA) to continue its eradication of all non-native trees from its property. It submitted a letter with its application to FEMA (obtained using a Freedom of Information Act [FOIA] request) to document the cost of poisoning all of the stumps of the trees with Garlon, which it predicts must be done twice per year for 10 years (see Attachment D). Both UC Berkeley and the East Bay Regional Park District are on record in their "vegetation management plans" as stating that Roundup is not capable of preventing resprouting of trees. Garlon is the only pesticide known to be effective for this purpose. The Material Safety Data Sheet documents that Garlon is a "Hazardous Chemical" which is very toxic to aquatic life, slightly toxic to birds, and biodegrades slowly in the environment (see Attachment C). [MPIC-2-26]

- **The Draft Environmental Impact Report (DEIR) for the Significant Natural Resource Areas Management Plan (SNRAMP) claims that the herbicides required to implement SNRAMP will not have a significant impact on the environment. It reaches that conclusion by providing inadequate and inaccurate information about the use of herbicides by the Natural Areas Program (NAP) in the present and by providing no information about the requirements for more herbicides in the future to kill the roots of thousands of trees that will be destroyed. In this public comment we will document these issues as follows:**
 1. **The DEIR provides no information about the frequency of use of herbicides by the Natural Areas Program**
 2. **The DEIR provides no information about imazapyr which is currently the herbicide the Natural Areas Program uses most frequently**

3. The DEIR claims that herbicide applications by the Natural Areas Program comply with San Francisco's Integrated Pest Management (IPM) Ordinance. In fact, the public record contains considerable evidence that herbicide applications by the Natural Areas Program frequently violate San Francisco's IPM Ordinance.
4. The DEIR misstates the facts about the toxicity of the herbicides being used by the Natural Areas Program
5. The use of herbicides on Twin Peaks that are known to be harmful to butterflies violates the Endangered Species Act
6. The DEIR provides no information about the increased use of herbicides that will be required to prevent the resprouting of the trees that will be destroyed by the implementation of SNRAMP.

1. Herbicide use by the Natural Areas Program

The Draft Environmental Impact Report (DEIR) provides no information about the volume of herbicides used by the Natural Areas Program (NAP). The sole sentence in the DEIR pertaining to volume of use of herbicides is this:

"In 2004, the Natural Areas Program accounted for less than 10 percent of the overall SFRPD pesticide use, even though the Natural Areas account for approximately 25% of the land managed by the SFRPD." (DEIR, page 365)

This statement provides inadequate information regarding NAP's pesticide use because:

- > It is eight years out of date.
- > Since we aren't informed by the DEIR of the volume of SFRPD's pesticide use, we are unable to determine the volume of NAP's pesticide use, i.e., NAP's pesticide use is 10% of WHAT?
- > We aren't reassured by the claim that NAP's pesticide use is only 10% of total RRPD pesticide use-if in fact that is true. The public has good reason to expect that parks designated as "unatural areas" should contain less pesticide than other park areas, such as golf courses, lawns, flower gardens, and landscaped areas.

Based on public records requests, we have the following information about the number of pesticide applications by the Natural Areas Program (See Attachment II-A):

Number of pesticide applications by the Natural Areas Program

<i>Active Ingredient</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>Percent Increase</i>
Triclopyr (Garlon)	17	16	36	3	
Glyphosate (Roundup)	7	6	31	39	
Imazapyr (Habitat)	1	1	1	39	
Aminopyralid (Milestone)	1	1	1	4	
Total	26	24	69	86	330%

We learn from these official reports of NAP's pesticide use which are required by the City's IPM Ordinance, that NAP's pesticide use has increased 330% since 2008. Therefore, the only information provided by the DEIR regarding NAP's pesticide use is inadequate and inaccurate because it is eight years old and pesticide use by the Natural Areas Program is increasing significantly from year to year, 330% in the past four years alone.

We also learn from these official reports of NAP's pesticide use that several other statements in the DEIR are inaccurate:

- > The DEIR claims that "Garlon is being phased out from use in Natural Areas and is only used for invasive plants in biologically diverse grasslands due to its target specificity." (DEIR, page 365)

According to the official reports of NAP's pesticide use, Garlon (active ingredient triclopyr) was used more often than any other pesticide until 2011. While use of Garlon decreased in 2011, it is still being used according to Pesticide Application Notices posted in the natural areas in 2012.

- > The statement that Garlon is "only used for invasive plants in ... grasslands" is contradicted by this statement in the DEIR:

"Treatment of tree stumps with San Francisco-approved pesticides (such as Roundup and Garlon) (DEIR, page 386)

- > The DEIR claims that glyphosate is the "primary product used." (DEIR, page 365). This statement is inaccurate. Official reports of NAP's pesticide use prove that triclopyr was used more often than glyphosate until 2011 when imazapyr was used as frequently as glyphosate. [SFFA-3-07]

■ **2. The DEIR provides no information about imazapyr which is currently the most frequently used herbicide**

For the most part NAP substituted a mixture of glyphosate and imazapyr for Garlon in 2011. Is this an improvement? Maybe not. Although glyphosate and imazapyr are assigned a lower hazard rating of "More Hazardous" by the Department of the Environment, the Natural Areas Program increased their pesticide applications in 2011 at least 20% compared to 2010. But more importantly, little is known about the toxicity of imazapyr and nothing is known about the toxicity of combining glyphosate and imazapyr. Imazapyr was approved for use in California in 2005, so only the minimal tests required by law have been done on it.

The Natural Areas Program is using imazapyr for a purpose different from that for which imazapyr was evaluated.

The "Aquatic Pesticide Application Plan for the San Francisco Estuary Invasive Spartina Project"¹ is cited by San Francisco's IPM program as the evaluation upon which it based its decision to add imazapyr to the list of pesticides approved for use in San Francisco in 2010. Was it appropriate for the city's IPM program to use the evaluation of imazapyr for the Spartina project as the basis of their decision to approve its use by the Natural Areas

Program? We don't think so. The circumstances of the Spartina project are substantially different from those of its use by the Natural Areas Program.

Imazapyr is used to eradicate non-native Spartina in a tidal estuary. For that reason the evaluation of its use assured the public that this herbicide would not accumulate in the environment because it would be flushed away from the ground by the tide twice each day.

The evaluation also said that when imazapyr was used in a pond or stable water source, it persisted in the ground for a longer period of time. In fact, that's exactly how imazapyr is being used by the Natural Areas Program. It has been used at Lake Merced and at Pine Lake, both stable water sources. It is also being used in Glen Canyon Park, which is a watershed.

We don't assume that imazapyr is being used safely to eradicate Spartina. However, even if it is, it does NOT follow that it is safe for use in watersheds that are not tidal, such as those being sprayed by the Natural Areas Program.

The Natural Areas Program is combining imazapyr and glyphosate which is both inappropriate and unnecessary

The manufacturer's labels for imazapyr and glyphosate suggest that combining them is not an approved use. The manufacturer's label for Aqua master (glyphosate) does not include imazapyr on the list of pesticides with which it can be safely combined. And the Polaris (imazapyr) label says that it should not be combined with another pesticide unless it is expressly recommended by the manufacturer of that pesticide.

The evaluation of imazapyr for the Spartina eradication project explained why imazapyr is being combined with glyphosate by the non-native Spartina eradication project. Imazapyr is apparently slow acting. It can take some months to kill the plant on which it is sprayed. Glyphosate, on the other hand, is fast acting. The plant on which it is sprayed begins to yellow and die within a few weeks. Glyphosate is therefore used by the Spartina eradication project to provide quicker feedback to those spraying the herbicide. They know within a few weeks if they have sprayed in the right place. They don't have to wait for the next season to spray again if necessary.

However, glyphosate should be applied to perennial broadleaf plants during their reproductive stage of growth, when they are budding in the late spring and summer, according to the manufacturer. In Glen Canyon Park, a mixture of glyphosate and imazapyr was sprayed on ivy in December 2011, clearly not the recommended time period for spraying. A month later, there was no indication that the ivy was damaged by this spraying. This suggests that it was unnecessary to combine glyphosate and imazapyr in this application. The public was exposed to the unnecessary risk of combining these herbicides, with no potential benefit of taking that risk.

The Natural Areas Program is spraying imazapyr under trees which is likely to kill the trees

Glyphosate is a non-selective herbicide. That is, it kills any plant it is sprayed on at the right stage of its growth. But imazapyr is far more insidious as a killer of plants because it is known to travel from the roots of the plant that has been sprayed to the roots of other plants.

For that reason, the manufacturer cautions the user NOT to spray near the roots of any plant you don't want to kill. For example, the manufacturer says explicitly that **imazapyr should not be sprayed under trees, because that tree is likely to be killed, whether or not that was the intention.**

Much of the ivy that was sprayed by the Natural Areas Program in Glen Park in December 2011 was sprayed under willow trees. The willow trees are native, so it seems unlikely that they intended to kill them.

Plants that are repeatedly sprayed with imazapyr are likely to develop a resistance to that herbicide.

The Federal Drug Administration recently banned some use of antibiotics in domesticated animals because the bacteria antibiotics are intended to kill are developing resistance to the antibiotics. This resistance is becoming increasingly dangerous to humans who are also the victims of those bacteria. Antibiotics are being rendered useless by overuse on domesticated animals. When humans need them, they won't work because bacteria have developed a resistance to them.

Likewise, plants and animals are also capable of developing resistance to pesticides. Glyphosate is the most heavily used herbicide in agriculture. Recent research indicates that weeds are developing resistance to glyphosate.;

The manufacturer of imazapyr says explicitly that repeated use of this herbicide is likely to result in resistance to it over the long term: "When herbicides with the same mode of action are used repeatedly over several years to control the same weed species in the same application site, naturally occurring resistant weed biotypes may survive ... propagate and become dominant in that site." So, does it make sense to use imazapyr on a plant as persistent as ivy?

The GGNRA reported spending \$600,000 over 3 years trying to eradicate ivy from 127 sites. They were successful in only 7 of the sites. Obviously eradicating ivy is not a one-shot deal.

If it is indeed necessary to eradicate ivy--and we doubt that it is--pesticides do not have to be used to do it. The Audubon Canyon Ranch in Bolinas Lagoon reported "qualified" success using hand-pulling methods on 5 acres over 5 years "utilizing 2375 volunteer hours." Biannual monitoring of resprouts will be required for the foreseeable future. It's a big commitment, but at least it is safe.

To conclude this section, we do not believe that imazapyr should be used in non-tidal watersheds. Nor do we believe it should be combined with glyphosate. In any case, the manner in which it has been used by the Natural Areas Program is not consistent with the manufacturer's recommendations regarding its use. [SFFA-3-08]

■ **3. Pesticide use by the Natural Areas Program frequently violates San Francisco's IPM Ordinance**

In lieu of providing any information about the actual use of pesticides by the Natural Areas Program, the DEIR claims that the mere fact that these pesticide applications comply with

San Francisco's IPM Ordinance ensures that there will be no significant impact on the environment from its pesticide use:

"Pesticide use ... would adhere to the /PM Program. As a result, water quality impacts from herbicide and pesticide use as part of programmatic projects would be less than significant." (DEIR, page 365)

There are two problems with this claim:

- > NAP has been granted exceptions to the IPM Ordinance to use toxic chemicals that are not used by other agencies in San Francisco: imazapyr and triclopyr.
 - Garlon (triclopyr): Tier I, Most Hazardous. Use Limitation: "Use only for targeted treatments of high profile or highly invasive exotics via dabbing or injections. May use for targeted spraying only when dabbing or injections are not feasible and only with use of a respirator. HIGH PRIORITY TO FIND ALTERNATIVE." (San Francisco IPM policy 2011)
 - Habitat (imazapyr): Tier II, More Hazardous. Use Limitation: "Preferred alternative to triclopyr for use on invasive weeds in natural areas such as broom, cotoneaster, or Arundo grass." (San Francisco IPM policy 2011)
- > Even after having been granted these exceptions, NAP has frequently violated the IPM Ordinance. Many of these violations have been reported to the Department of the Environment by the public and are therefore a part of the public record:
 - NAP's report of pesticide use is frequently incomplete: targets for applications, locations of applications, etc., are frequently missing from NAP's reports. (See Attachment II-A)
 - We have photographs of notices of pesticide applications for which there are no corresponding entries on the official record of pesticide use maintained by the Department of the Environment. This suggests that the official reports of NAP's pesticide use are not complete. These photographs have been sent to the Department of the Environment.
 - NAP's notices of pesticide application are frequently missing the date of application, thereby making it impossible for the public to know when the area is safe to enter. Photographs of these incomplete notices have been sent to the Department of the Environment.
 - NAP used imazapyr in 2008 and 2009, prior to its approval for use by San Francisco's IPM policy in 2011.
 - NAP sprayed Garlon (triclopyr) prior to 2011 when only "dabbing and injection" were approved application methods by the IPM policy.
 - NAP sprayed Garlon (triclopyr) in 2011 without using a respirator, as required by the IPM Ordinance in
 - 2011. (see Attachment 11-B)

- NAP sprayed herbicides containing glyphosate in the water of Lake Merced which is officially designated red-legged frog habitat in violation of US Fish and Wildlife regulations which ban the use of many herbicides, including glyphosate, from designated habitat for red-legged frogs and other endangered amphibians.
- Volunteers working in the natural areas are not authorized to use herbicides because they have not been trained and do not have the proper equipment with which to safely apply herbicides. Some of these unauthorized volunteers have been seen spraying herbicides without posting the required notification of pesticide application. These incidents have been reported to the Department of the Environment.

Conclusion

The final Environmental Impact Report for the SNRAMP must:

- > **Provide specific and current data about pesticide use by the Natural Areas Program**

If this information is provided in the final Environmental Impact Report it is unlikely that the EIR will be in a position to claim that there will be no significant impact on the environment resulting from the implementation of the SNRAMP. The animals that live in our parks and the humans who visit them therefore deserve the mitigation required to ensure their health and safety. Furthermore, CEQA law requires such mitigation. [SFFA-3-09]

- **4. The DEIR makes inaccurate statements regarding the toxicity of the pesticides used by the Natural Areas Program**

The DEIR contains little information regarding the toxicity of the pesticides being used by the Natural Areas Program. What little information it provides is entirely inaccurate:

“[Garlon] degrades quickly in the environment and has low toxicity to aquatic species (Dow2009).” (DEIR, page 365)

The following are the accurate statements regarding biodegradability and toxicity to aquatic life quoted directly from the Material Safety Data Sheet which is mandated by the federal government and prepared by the manufacturer of the product (Dow) based on laboratory studies conducted by the Environmental Protection Agency which are also mandated by federal law (see Attachment II- C):

“Persistence and Degradability

Chemical degradation (hydrolysis) is expected in the environment. **Material is expected to biodegrade only very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.”**

(emphasis added)

“Ecotoxicity

Material is highly toxic to aquatic organisms on an acute basis ...” (emphasis added)

This flagrant misrepresentation of the toxicity of Garlon is appalling. The DEIR contains no accurate information about the toxicity of any of the pesticides used by the Natural Areas Program. In the only case in which it provides any information, it resorts to egregious lies.

5. The use of herbicides known to be harmful to butterflies on Twin Peaks violates the Endangered Species Act

The Mission Blue butterfly is a federal endangered species which existed historically on Twin Peaks in San Francisco. San Francisco's Natural Areas Program has been trying to reintroduce the Mission Blue to Twin Peaks for several years, so far with limited success. This reintroduction effort is reported by the DEIR.

Herbicides are being sprayed on Twin Peaks to control non-native vegetation. **Twin Peaks was sprayed with herbicides 16 times in 2010 and 19 times in 2011.**

A recently published study reportsⁱ that the reproductive success of the Behr's metalmark butterfly was significantly reduced (24-36%) by herbicides used to control non-native vegetation. Two of those pesticides are used on Twin Peaks, imazapyr and triclopyr. Triclopyr was used most often on Twin Peaks in 2010 and imazapyr in 2011.

The study does not explain how this harm occurs. It observes that the three herbicides that were studied work in different ways. It therefore speculates that the harm to the butterfly larva may be from the inactive ingredients of the pesticides which they have in common, or that the harm comes to the larva from the plant which is altered in some way by the herbicide application. Either theory is potentially applicable to the herbicides used on Twin Peaks and consequently harmful to the Mission Blue.

The Endangered Species Act requires that the Natural Areas Program stop spraying these herbicides on Twin Peaks because they are known to be harmful to the reproductive success of butterflies. Unless further scientific study exonerates these herbicides, the law obligates us to prohibit their use where the endangered Mission Blue butterfly is known to exist.

Conclusion

The final Environmental Impact Report for the SNRAMP must:

- > **Provide specific and current data about pesticide use by the Natural Areas Program**
[SFFA-3-10]
- **6. The DEIR provides no information about the increased use of pesticides that will be required to implement the SNRAMP**

The DEIR's claim that NAP's herbicide use will have no significant impact on the environment is apparently based on historic data from 2004 (which it does not share with the reader) and an assumption that historic use was in compliance with San Francisco's IPM Ordinance. As we have shown, data from 2004 does not describe NAP's present use, NAP is granted exceptions for most of its pesticide use, and NAP has a substantial public record of violating IPM policy.

However, the DEIR is supposed to evaluate the environmental impacts of implementing the SNRAMP. It is therefore obligated to look forward, not backward. The DEIR tells us nothing about NAP's use of herbicides in the future as a result of the implementation of the SNRAMP.

This is the most significant failing of the DEIR because destroying thousands of trees will require the use of more pesticides. Most of the non-native trees that will be destroyed will resprout if their trunks are not sprayed immediately with Garlon. This initial application of Garlon is often insufficient to kill the roots of the tree. Repeated applications are often required to kill the roots of the tree.

The DEIR acknowledges the need to use Garlon on the stumps of trees that have been destroyed: "Treatment of tree stumps with San Francisco-approved pesticides (such as Roundup and Garlon) (DEIR, page 386)

However, the DEIR provides no information about how much more pesticide must be used as a result of destroying thousands of non-native trees. We turn to the University of California at Berkeley for this information. UC Berkeley has been clear-cutting all non-native trees from its properties for over 10 years. Several years ago it applied for grant funding from the Federal Emergency Management Agency (FEMA) to continue its eradication of all non-native trees from its property. It submitted the attached letter with its application to FEMA (obtained with a FOIA request) to document the cost of poisoning all of the stumps of the trees with Garlon. UC predicts Garlon must be applied to resprouts twice per year for 10 years. (See II- D) Both UC Berkeley and East Bay Regional Park District are on record in their "vegetation management plans" that Roundup is not capable of preventing the resprouts of trees. Garlon is the only pesticide known to be effective for this purpose. The Material Safety Data Sheet documents that Garlon is a "Hazardous Chemical" which is very toxic to aquatic life, slightly toxic to birds, and biodegrades slowly in the environment. (See Attachment II- D)

Conclusion

The final Environmental Impact Report for the SNRAMP must:

- > **Provide accurate information about the toxicity of the pesticides being used by the Natural Areas Program**
- > **Quantify, evaluate and mitigate the increased pesticide use that will be required as a result of destroying thousands of trees that will resprout unless their stumps are treated with pesticides. [SFFA-3-11]**
- **WTPCC opposes repeated applications of herbicides in natural areas to remove non-native plants. Applications of herbicides in NAP-managed areas have increased by 330% over the last four years (from a total of 26 applications in 2008 to 86 applications in 2011). Applications will continue to rise, since NAP plans to use repeated herbicide applications to kill the roots of the thousands of trees it plans to cut down. The Draft DEIR does not consider impacts from this increase in usage. [WTPCC-1-04]**

- We are also concerned about inadequate and incorrect signage by NAP when it applies herbicides in natural areas. For example, a recent sign warned that herbicides would be applied “throughout” McLaren Park, with no more specific information on where other than “throughout.” People walking in the park had two options- continue to walk in the park and risk exposure to herbicides (since you can’t know from the sign exactly where in the park they were applied) or leave the park. This inadequate signage essentially closed access to large areas of McLaren Park for a period of time as people tried to avoid exposure. [WTPCC-1-05]
- WTPCC is also concerned that NAP applies herbicides incorrectly, causing needless exposure and risk to people, pets, and wildlife from unnecessary spraying. For example, in December 2011, NAP posted a sign that it planned to spray a mixture of glyphosate and imazapyr to eradicate cape ivy in Glen Canyon. However, the California Invasive Plant Council website says spraying to destroy cape ivy must be done in the late spring, when the plant is “photosynthesizing actively but is past flowering, so the active ingredients [in the herbicide] move down with the sugars that are transported to underground storage organs.” The spraying should never have been done in December when it would not be effective. NAP essentially put people, pets, and wildlife at risk of exposure to the herbicide for no reason, and ensured they would have to reapply the same herbicides a second time in the late spring if they want to kill the cape ivy.

It is not enough to say that NAP herbicide applications are approved as part of the SF Integrated Pest Management Ordinance that governs herbicide use by city agencies and are therefore okay, as the Draft DEIR does. The DEIR should study the application records more closely. There are many cases where NAP usage violated IPM rules. For example, NAP applied imazapyr in 2008 and 2009, two years prior to its approval for use by SF IPM in 2011. NAP “sprayed” Garlon in years prior to 2011, even though SF IPM had approved its use only by “dabbing and injection.” NAP sprayed herbicides containing glyphosate near the water at Lake Merced, even though US Fish and Wildlife regulations ban the use of that herbicide (and many others) where there is red-legged frog habitat; Lake Merced is red-legged frog habitat. [WTPCC-1-06]

- Pg 365: Garlon degrades quickly in the environment and has low toxicity to aquatic species. This is not true of Garlon 4 Ultra, which is what the NAP has been using in the Natural Areas. What the Dow MSDS actually says is, Material is expected to degrade only very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability. It also says it is highly toxic to aquatic organisms. [Bose-1-03]
- Pg 365: Pesticides would be used as infrequently as possible in the Natural Areas to achieve the desired results...

The DEIR is vague about the amounts of pesticide to be used, and in what situations. Desired results being an undefined object, this statement may be used to justify anything. Given the NAP’s record of sharply increasing pesticide use, we think it should specify the expected amounts to be used under each of the options, both the Proposed Project and the Alternatives. (NAP’s Garlon application increased from 16 times in 2010.) Quite aside from

any herbicides associated with Native Plant introductions, we would expect a sharp increase in toxic pesticide use owing to tree-felling. It is important to quantify these to assess Environmental Impact. [Bose-1-12]

- P. 365: Pesticide use would be carefully monitored, would involve the use of least toxic methods and materials that are appropriate to the environment in which they are applied, and would adhere to the IPM Program. A large number of violations of the IPM by NAP have been brought to our attention in the last two years: applications of Garlon by spraying instead of daubing; no respirators worn when working with chemicals requiring them; no dates on application notices; use of unauthorized pesticides; pesticides used at unauthorized locations (e.g. glyphosate used near red-legged frog habitat). (Some of these are shown on our website at <http://sutroforest.com/2011/10/02/san-francisco-natural-areas-pesticide-violations/>) In addition, the NAP has been routinely using pesticides classified by San Francisco's Department of the Environment as Tier I or Tier II, so 'least toxic' is a meaningless descriptor in the context. They are using chemicals that are as toxic as they are permitted to use. In view of this use and these incidents, and these are only the ones we ran across or were shown, the DEIR's assertion of careful monitoring and compliance seems excessively sanguine. Violations seem to be unnoticed, ignored or regularized, post facto. We would like to see concrete measures of oversight from a neutral person or board. [Bose-1-13]
- I am also quite concerned about cutting 25% of park trails and the increased use of toxic pesticides that has an impact on almost every potential user of the parks.[Bowman-1-03]
- The amount of toxic chemicals being used on existing natural area restorations needs to be comprehensively evaluated, and this should be done for as many years as information is available. [Bowman-1-11]
- Equally concerning is the constant pesticide warning signs with little indication of where the spraying is occurring. This certainly impacts my willingness to go to the parks, particularly Mt Davidson, which appears to have spraying right next to the trail to kill the blackberries and ivy. [Bowman-2-10]
- We are also opposed to NAP's plans to cut down perfectly healthy trees and the growing use of pesticides to achieve their "native" environment. [Butler-1-03]
- (6) According to the SF Forest Alliance, the most toxic herbicides would continue to be used. [Hess-1-06]
- I am very dismayed to learn that the city has used Garlon in Glen Park Canyon. Glen Canyon is used by dogs and young children at Glen Ridge Childcare and Silver Tree Day Camp. I have suffered the loss of one dog, at the age of 5 years, from kidney failure. Both my daughters suffered from kidney disease at a young age, although there is no prior history of kidney disease in my family or my husband's family. [Hull-1-02]
- The plan is appalling and absolutely defies reason. I have talked to someone who works in Golden Gate Park and received more details, and have also read a report that concludes the argument in favor of the plan is specious.

But here are my primary concerns: 1. toxic spraying to assure these “non-native” plants and trees don’t regrow - really? How does that improve an environment that is already suffering from a shortage of bees and birds because of environmental poisons? [Johns-1-03]

- If toxic spraying is part of the plan, has the city notified the state and federal EPA? [Johns-1-07]
- Strong toxic pesticides are increasingly necessary.

3. Because Native Plants are no longer suited to this eco-system – and because of the need for NAP to stop Natural Succession, when different plants in turn dominate a particular area – the “Natural” Areas Program requires a great deal more pesticides than would be needed if these areas were truly natural. The Report underplays both the amounts and the toxicity of the pesticides that will be used. In fact, it does not even say how much will be used.

4. Garlon (triclopyr), Roundup (glyphosate), and Imazapyr are mentioned as the most likely chemicals to be used. Garlon is a Tier I (Most Hazardous) chemical. Roundup and Imazapyr are Tier II. No Tier III herbicides are even mentioned. [Kessler-1-04] [Kessler-2-04]

- On p 365, it says Garlon degrades quickly and has low toxicity to aquatic species. However, the Material Safety Data Sheet (MSDS) (http://www.fs.fed.us/r5/eldorado/documents/freds/WEB%20Only/garlon_4_msd_s_rev_030909.pdf) says “Material is highly toxic to aquatic organisms” and also that it is “slightly toxic to birds.” The MSDS also says the material is “expected to biodegrade only very slowly in the environment” and “Fails to pass OECD/EEC tests” (for ready biodegradability). The report says Garlon is being phased out; but if the NAP’s tree-felling program goes through, a lot more will need to be used to prevent resprouting since it is the only herbicide known to prevent the resprouts of eucalypts. [Kessler-1-05] [Kessler-2-05]
- Imazapyr – which was approved for NAP’s use in 2011 – is not approved for use in Europe. It moves readily in the soil, and is excreted by some plants through their root systems. It does not biodegrade quickly. Its end-product, quinolic acid, is a neurotoxin. The report does not mention these issues where it mentions using Imazapyr. [Kessler-1-06] [Kessler-2-06]
- Roundup (glyphosate) is the second most commonly used chemical in NAP (used 31 times in 2010 compared to Garlon’s having been used 36 times). This has been linked to birth defects (including brain damage and neural tube damage) in humans and in animals. (Glyphosate-Based Herbicides Produce Teratogenic Effects on Vertebrates by Impairing Retinoic Acid Signaling; Carrasco et al. <http://pubs.acs.org/doi/abs/10.1021/tx1001749>) It is also highly lethal to amphibians, according to a University of Pittsburgh study. This is a concern because many of the areas where it is used have water nearby. Glen Canyon, for instance, has a stream running through it. Roundup is also associated with changes to the soil and fungal root disease. <http://www.reuters.com/article/2011/08/12/us-glyphosate-idUSTRE77B58A20110812> [Kessler-1-07] [Kessler-2-07]
- The main argument used by the Draft EIR to justify the use of pesticides in the natural areas is that NAP is following the rules, that therefore by definition there is no environmental impact from its use. (This reminds me of a recent US Supreme Court decision in which

patients harmed by medical devices are now prohibited from suing the manufacturers of those devices if they were approved by the FDA.) There are two reasons why this argument is not an adequate defense: (1) NAP's uses of both Garlon and Imazapyr have been granted by exception by the Department of the Environment and they are not used by other agencies in the city. (2) NAP does not always follow the rules, such as posting a date of the application of the pesticide as required by policy. [Kessler-1-08] [Kessler-2-08]

- was also extremely concerned to read that Rec and Park is using pesticides to kill 'non-native' plants as part of the so-called restoration project. Since I like to use many of the City parks like McClaren and Glen Park with my family and dogs, I am now very worried about exposure to dangerous toxins. This is beyond reprehensible! How dare you risk the health of our citizens in order to maintain poor plant choices - all of which is being done at my (taxpayer) expense! [Mattingly-1-02]
- Herbicide use by the Natural Areas Program. The Draft Environmental Impact Report (DEIR) provides no information about the volume of herbicides used by the Natural Areas Program (NAP). The sole sentence in the DEIR pertaining to volume of use of herbicides is this:

"In 2004, the Natural Areas Program accounted for less than 10 percent of the overall SFRPD pesticide use, even though the Natural Areas account for approximately 25% of the land managed by the SFRPD." (DEIR, page 365)

This statement provides inadequate information regarding NAP's pesticide use because:

- > It is eight years out of date.
- > Since we aren't informed by the DEIR of the volume of SFRPD's pesticide use, we are unable to determine the volume of NAP's pesticide use, i.e., NAP's pesticide use is 10% of WHAT?
- > We aren't reassured by the claim that NAP's pesticide use is only 10% of total RRPD pesticide use – if in fact that is true. The public has good reason to expect that parks designated as "natural areas" should contain less pesticide than other park areas, such as golf courses, lawns, flower gardens, and landscaped areas.

Based on public records requests, we have the following information about the number of pesticide applications by the Natural Areas Program (See Attachment A):

We learn from these official reports of NAP's pesticide use which are required by the City's IPM Ordinance, that NAP's pesticide use has increased 265% since 2008. Therefore, the only information provided by the DEIR regarding NAP's pesticide use is inadequate and inaccurate because it is eight years old and pesticide use by the Natural Areas Program is increasing significantly from year to year, 265% in the past three years alone.

We also learn from these official reports of NAP's pesticide use that several other statements in the DEIR are inaccurate:

- > The DEIR claims that "Garlon is being phased out from use in Natural Areas and is only used for invasive plants in biologically diverse grasslands due to its target specificity." (DEIR, page 365)

According to the official reports of NAP's pesticide use, Garlon (active ingredient Triclopyr) was used more often than any other pesticide in all three years, including the most recent year. This FACT is inconsistent with a claim that Garlon is being "phased out."

The statement that Garlon is "only used for invasive plants in ... grasslands" is contradicted by this statement in the DEIR:

"Treatment of tree stumps with San Francisco-approved pesticides (such as Roundup and Garlon) (DEIR, page 386)

- > The DEIR claims that Glyphosate is the "primary product used." (DEIR, page 365). This statement is inaccurate. Official reports of NAP's pesticide use prove that Triclopyr was used more often than Glyphosate in all three years for which we have data. [McAllister-3-04]
- Pesticide use by the Natural Areas Program frequently violates San Francisco's IPM Ordinance. In lieu of providing any information about the actual use of pesticides by the Natural Areas Program, the DEIR claims that the mere fact that these pesticide applications comply with San Francisco's IPM Ordinance ensures that there will be no significant impact on the environment from its pesticide use:

"Pesticide use ... would adhere to the IPM Program. As a result, water quality impacts from herbicide and pesticide use as part of programmatic projects would be less than significant." (DEIR, page 365)

There are two problems with this claim:

- > NAP has been granted exceptions to the IPM Ordinance to use toxic chemicals that are not used by other agencies in San Francisco: Imazapyr and Triclopyr.
 - Garlon (Triclopyr): Tier I, Most Hazardous. Use Limitation: "Use only for targeted treatments of high profile or highly invasive exotics via dabbing or injections. May use for targeted spraying only when dabbing or injections are not feasible and only with use of a respirator. HIGH PRIORITY TO FIND ALTERNATIVE." (San Francisco IPM policy 2011)
 - Habitat (Imazapyr): Tier II, More Hazardous. Use Limitation: "Preferred alternative to triclopyr for use on invasive weeds in natural areas such as broom, cotoneaster, or Arundo grass." (San Francisco IPM policy 2011)

- > Even after having been granted these exceptions, NAP has frequently violated the IPM Ordinance. Many of these violations have been reported to the Department of the Environment by the public and are therefore a part of the public record:
 - NAP's report of pesticide use is frequently incomplete: targets for applications, locations of applications, etc., are frequently missing from NAP's reports. (See Attachment A)
 - We have photographs of notices of pesticide applications for which there are no corresponding entries on the official record of pesticide use maintained by the Department of the Environment. This suggests that the official reports of NAP's pesticide use are not complete. These photographs have been sent to the Department of the Environment.
 - NAP's notices of pesticide application are frequently missing the date of application, thereby making it impossible for the public to know when the area is safe to enter. Photographs of these incomplete notices have been sent to the Department of the Environment.
 - NAP used Imazapyr in 2008 and 2009, prior to its approval for use by San Francisco's IPM policy in 2011.
 - NAP sprayed Garlon (Triclopyr) prior to 2011 when only "dabbing and injection" were approved application methods by the IPM policy.
 - NAP sprayed Garlon (Triclopyr) in 2011 without using a respirator, as required by the IPM Ordinance in 2011. (see Attachment B)
 - NAP sprayed herbicides containing Glyphosate in the water of Lake Merced which is officially designated red-legged frog habitat in violation of US Fish and Wildlife regulations which ban the use of many herbicides, including Glyphosate, from designated habitat for red-legged frogs and other endangered amphibians.
 - Volunteers working in the natural areas are not authorized to use herbicides because they have not been trained and do not have the proper equipment with which to safely apply herbicides. Some of these unauthorized volunteers have been seen spraying herbicides without posting the required notification of pesticide application. These incidents have been reported to the Department of the Environment.

The final Environmental Impact Report for the SNRAMP must:

- > Provide specific and current data about pesticide use by the Natural Areas Program
- > Provide accurate information about the toxicity of the pesticides being used by the Natural Areas Program
- > Quantify, evaluate and mitigate the increased pesticide use that will be required as a result of destroying thousands of trees that will resprout unless their stumps are treated with pesticides.

If this information is provided in the final Environmental Impact Report it is unlikely that the EIR will be in a position to claim that there will be no significant impact on the environment resulting from the implementation of the SNRAMP. The animals that live in our parks and the humans who visit them therefore deserve the mitigation required to ensure their health and safety. Furthermore, CEQA law requires such mitigation. [McAllister-3-05]

- The DEIR makes inaccurate statements regarding the toxicity of the pesticides used by the Natural Areas Program. The DEIR contains little information regarding the toxicity of the pesticides being used by the Natural Areas Program. What little information it provides is entirely inaccurate:

“[Garlon] degrades quickly in the environment and has low toxicity to aquatic species (Dow2009).” (DEIR, page 365)

The following are the accurate statements regarding biodegradability and toxicity to aquatic life quoted directly from the Material Safety Data Sheet which is mandated by the federal government and prepared by the manufacturer of the product (Dow) based on laboratory studies conducted by the Environmental Protection Agency which are also mandated by federal law (see Attachment C):

“Persistence and Degradability

Chemical degradation (hydrolysis) is expected in the environment. **Material is expected to biodegrade only very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.”**

(emphasis added)

“Ecotoxicity

Material is highly toxic to aquatic organisms on an acute basis ...” (emphasis added)

This flagrant misrepresentation of the toxicity of Garlon is appalling. The DEIR contains no accurate information about the toxicity of any of the pesticides used by the Natural Areas Program. In the only case in which it provides any information, it resorts to egregious lies.

The final Environmental Impact Report for the SNRAMP must:

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- > Provide accurate information about the toxicity of the pesticides being used by the Natural Areas Program
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- The DEIR provides no information about the increased use of pesticides that will be required to implement the SNRAMP. The DEIR's claim that NAP's herbicide use will have no significant impact on the environment is apparently based on historic data from 2004 (which it does not share with the reader) and an assumption that historic use was in compliance with San Francisco's IPM Ordinance. As we have shown, data from 2004 does not describe NAP's present use, NAP is granted exceptions for most of its pesticide use, and NAP has a substantial public record of violating IPM policy.

However, the DEIR is supposed to evaluate the environmental impacts of implementing the SNRAMP. It is therefore obligated to look forward, not backward. The DEIR tells us nothing about NAP's use of herbicides in the future as a result of the implementation of the SNRAMP.

This is the most significant failing of the DEIR because destroying thousands of trees will require the use of more pesticides. Most of the non-native trees that will be destroyed will resprout if their trunks are not sprayed immediately with Garton. This initial application of Garton is often insufficient to kill the roots of the tree. Repeated applications are often required to kill the roots of the tree.

The DEIR acknowledges the need to use Garton on the stumps of trees that have been destroyed: "Treatment of tree stumps with San Francisco-approved pesticides (such as Roundup and Garlon) (DEIR, page 386)

However, the DEIR provides no information about how much more pesticide must be used as a result of destroying thousands of non-native trees. We turn to the University of California at Berkeley for this information. UC Berkeley has been clear-cutting all non-native trees from its properties for over 10 years. Several years ago it applied for grant funding from the Federal Emergency Management Agency (FEMA) to continue its eradication of all non-native trees from its property. It submitted the attached letter with its application to FEMA (obtained with a FOIA request) to document the cost of poisoning all of the stumps of the trees with Garlon which it predicts must be done twice per year for 10 years. (See Attachment D) Both UC Berkeley and East Bay Regional Park District are on record in their "vegetation management plans" that Roundup is not capable of preventing the resprouts of trees. Garlon is the only pesticide known to be effective for this purpose. The Material Safety Data Sheet documents that Garlon is a "Hazardous Chemical" which is very toxic to aquatic life, slightly toxic to birds, and biodegrades slowly in the environment. (See Attachment C)

The final Environmental Impact Report for the SNRAMP must:

- > Provide specific and current data about pesticide use by the Natural Areas Program
- > Provide accurate information about the toxicity of the pesticides being used by the Natural Areas Program
- > Quantify, evaluate and mitigate the increased pesticide use that will be required as a result of destroying thousands of trees that will resprout unless their stumps are treated with pesticides.

If this information is provided in the final Environmental Impact Report it is unlikely that the EIR will be in a position to claim that there will be no significant impact on the environment resulting from the implementation of the SNRAMP. The animals that live in our parks and the humans who visit them therefore deserve the mitigation required to ensure their health and safety. Furthermore, CEQA law requires such mitigation. [McAllister-3-07]

- I live on Mt. Davidson in the city. I have been very upset with the constant reapplication of pesticides, as I walk my dogs there. I also am upset at all the trees that have been felled in the last two years. This is one of the very few places left in the city that is still a forest, a little refuge. My husband went out and talked to some of the folks from Parks and Rec while they were spraying pesticides, as well as cutting back thickets. They told him that the SF Forest Alliance was an extremist group. Perhaps it would be helpful if others knew just what the NAP's purpose was, as well as the fact that the city has a budget crisis and this is an enormous waste of taxpayer money. Thank you for your time. [Milstein-1-01]
- I have never given public comment before about anything in San Francisco. I am a consultant and extremely busy. However, I am so bothered by the use of pesticides by the Natural Areas Program of Park and Recreation that I had to get involved. I have been actively trying for the past year to stop the Natural Areas Program from using Tier 1 and Tier 2 pesticides to "kill" non-native plants. In San Francisco, the Board of Supervisors legislated that all San Francisco officers, boards, commissions, and departments of the City and County implement the Precautionary Principle in conducting the City and County's affairs. The Precautionary Principle states, "where threats of serious or irreversible damage to people or nature exist, lack of full scientific certainty about cause and effect shall not be viewed as sufficient reason for the City to postpone cost effective measures to prevent the degradation of the environment or protect the health of its citizens." And yet, the Department of the Environment and the Natural Areas Program justify using Tier 1 and Tier 2 pesticides even though they lack full scientific certainty about how safe they are to use. For Garlon 4 Ultra, a Tier 1 pesticide, the Department of the Environment has told me directly that while there is a study that has been conducted that raises serious concern, the methods of the study are not strong enough to justify outright banning of Garlon 4 Ultra. [Otto-1-01]
- As citizens, all we can rely on is the information that the San Francisco Department of the Environment and the manufacturer of the pesticides tell us. For Garlon 4 Ultra, the Department of the Environment limits its use "only for targeted treatments of high profile or highly invasive exotics via dabbing or injections. May use for targeted spraying only when dabbing or injection are not feasible and only with use of a respirator." The Natural Areas Program sprays the whole hillside of Glen Park Canyon with Garlon 4 Ultra to get rid of oxalis, commonly known as clover. The manufacturer of Garlon 4 Ultra publishes in their Material Safety Data Sheet that it degrades slowly in the environment, fails tests for ready biodegradability, is "highly toxic" to aquatic life and "slightly toxic" to birds. In Glen Park Canyon, along the stream, there are signs heralding this riparian community and how it serves as a resting spot for migratory birds. How ironic that the Natural Areas Program then uses pesticides that are "highly toxic" to aquatic life and "slightly toxic" to birds. The Precautionary Principle is supposed to be there to protect all of us. I worry about the wildlife

that live in Glen Canyon Park and rely on the vegetation to survive. I worry about the pre-school children who come and play in the park everyday. I worry about all the dogs who run on the trails and eat the grasses. And I worry about my city that I love so much ignoring the repeated concerns of its citizens and refusing to alter course. [Otto-1-02]

- I am vehemently opposed to the recommendations of the draft Environmental Impact Report for the Natural Areas Program. The Natural Areas Program has not effectively demonstrated its ability to:

1. kill the non-native invasive species it poisons each year - it grows back each spring
2. comply with regulations on how to administer the poisons - they are frequently caught applying the poisons without adequate notice or using appropriate respirators
3. create a sustainable native plant garden without relying on toxic pesticides.

I cannot understand how we would then turn around and give the Natural Areas Program more authority over more land to continue with these same practices. [Otto-1-03]

- I have another very great concern with the NAP, which is its use of pesticides and herbicides. As a resident of Upper Noe Valley, I often walk in Glen Canyon. So do thousands of others, day after day. And yet, Glen Canyon is one of the areas where the NAP uses herbicides and pesticides, again and again. Rec and Park itself recognizes that "visitors, kids and dogs might come in direct contact with the weed [killer]", but their only solutions are to "limit the areas" where they spray and to seek other solutions, which they state they have not found. (SF Recreation & Parks Department, "Significant Natural Resource Areas Management Plan Overview", n.d., p. 4).

The NAP applied Garlon, a Tier I (most hazardous!) pesticide, in its "Natural Areas" 36 times in 2010 (up from 16 times in 2009). It used Roundup or Aquamaster, Tier II (hazardous) pesticides, 42 times in 2010, up from 7 times in 2009. Not only are we - adults, seniors, kids and dogs - affected by these chemicals, so are all the critters living in the NAP open spaces. In Glen Canyon, the coyotes, racoons, skunks and other wildlife have no place to go and no place to hide when these poisons are laid down, which then become part of the environment.

While such applications are legal, they are neither safe nor right. The NAP should be reduced in scope, so that manual methods of weeding and maintenance can be used, not toxic chemicals. The native plants in Sutro Forest are not doused with chemicals; this is the direction that the NAP should go. With a smaller area, the NAP could use environmentally appropriate methods, not spraying and daubing with herbicides and pesticides. [Pittin-1-02]

- The fact that this is an urban city also brings to question the toxic herbicides that are used in the natural areas concerned, as this might cause troubling health risks to park users including seniors and children. [Reichardt-1-03]
- * Each year the Natural Areas Program relies on the use of larger and larger quantities of four toxic herbicides classified by the City as Tier I (Most Hazardous) and Tier II (More Hazardous) to prevent "invasive" plants from re-establishing themselves. All of these chemicals have been associated with serious health problems in animal and human

populations. The DEIR does not specify how much pesticide will be used to maintain Mt. Davidson as a "Natural Area." On our recent walks we saw several signs posted to notify the public that Imazapyr had been applied in the area. This is a new pesticide. What is known about it is that it does not degrade so it travels through the environment. It's a neurotoxin that can cause irreversible eye damage. And it has been banned in the EU since 2002. [Risk-1-05]

- The NAP program makes use of herbicides - this is an unhealthy and unwise decision for land that is designated for park and recreational use [Schlund-1-02]
- I am vehemently opposed to poisoning of the ground to protect newly reintroduced "native species", since the toxins enter animals' food chain and work their way up through many species to top predators. The mountain supports both local birds and flocks of migratory bird species, so the effects of poisoning transcend our city/county boundaries. Also, children and domestic pets can be poisoned. Many dog walkers regularly use this park and need full, safe access. [Thomas-1-01]
- Poisoned ground water could enter our storm drains and S.F. Bay. [Thomas-1-05]
- NAP endangers the public safety by exposing us to vector borne diseases and pesticides. Habitat restorations diminish public safety by encouraging the proliferation of mosquitoes and ticks along with the diseases they carry which affect people, dogs and horses. NAP advocates the construction of water features which become mosquito breeding grounds in San Francisco and Pacifica recreational areas. The artificial habitats created and supported by NAP have resulted in the propagation of stagnant pools of water, standing water in the stumps of trees that have been cut down, abandoned tires, and brush piles. These sites are all ideal breeding grounds for disease-borne mosquitoes. Evidence of such can be seen at such sites as Glen Park (near the children's day care facility). NAP merely states: Staff should be provided education regarding the most effective way to avoid contracting WNV, which is to not get bitten by mosquitoes. Clothing such as long pants, long-sleeved shirts, and application of a mosquito repellent may all be helpful in this regard. What about the public?

The environmental features the CDC instructs you to remove to protect you, your family and your community from ticks are precisely the environmental features NAP is implementing.

The CDC recommends landscaping techniques to create a tick-safe zone around homes, parks, and recreational areas:

- > Removal leaf litter, brush piles and woodpiles.
- > Clear tall grasses and brush.
- > Place wood chips or gravel between lawns and wooded areas to restrict migration to recreational areas.

Recommendation: The natural or biodegradable (branches trees and logs) elements shall be preserved during vegetation management activities or replaced with brush piles." (note-the phrase "vegetation management activities" refers in part to their plan to cut down 15,000 eucalyptus trees merely because they are non-native. They don't intend to remove the

resultant lumber or leaf litter and the remaining stumps will become mosquito-breeding sites as well). [Valente-1-02]

- NAP exposes the public to excessive use of dangerous herbicides

The San Francisco Department of the Environment issued NAP a variance to allow the spraying of Garlon Ultra 4, a poison that had not been permitted for use in parks in San Francisco except under extreme and limited circumstances, and then only by dabbing. The variance now allows the spraying of this chemical.

Glen Canyon Park is a case in point. Notices were posted of impending spraying of Garlon 4 Ultra. This park has a constant stream of walkers – adults, children and dogs. A preschool and a summer camp use the park. And there is a natural creek and resident wildlife. Not only is this dangerous to utilize these types of chemicals around the public, posted notices that NAP is applying pesticides or herbicides are frequently missing the required date and time of application. People seeing the notice don't know whether the poisons were used and whether it's safe to re-enter. This is a clear violation of the SF Department of the Environment's rules regarding the use of herbicides.

Roundup is another of the poisonous pesticides currently used in our parks and being considered as a substitute for the Garlon Ultra 4. The use of Garlon and Roundup by NAP is increasing. In 2009, NAP applied Roundup (or Aquamaster, or glyphosate) only 7 times. One year later, in 2010, they applied it 42 times. In 2009, NAP applied Garlon 16 times. In 2010, NAP applied Garlon 36 times.

NAP has also applied pesticides that the Dept. of the Environment has not approved. For example, NAP applied Imazapyr at Pine Lake in 2009; it was not approved for use by the Dept. of the Environment until 2011. NAP has applied pesticides incorrectly. In November 2010, NAP posted that they were spraying Aquamaster near the shoreline of Lake Merced to kill ludwigia, an aquatic weed. However, Lake Merced is red-legged frog habitat, and Aquamaster is not supposed to be used within 60 feet of water bodies in red-legged frog habitat. NAP staff have been observed spraying Garlon without a respirator, as required by the Dept. of Environment.

Garlon Ultra 4 and Roundup are not meant to be used in recreational areas.

Scientific American published an article addressing the toxic nature of Roundup's formula in "Weed-Whacking Herbicide Proves Deadly to Human Cells". Most cancers have a cumulative variety of causes. The incidence of cancer cases is growing in dogs, and pesticides are included as one of the culprits (www.health-report.co.uk/cancer-pesticides-245T-24D.html). Indeed, Garlon may be more toxic for dogs than people because dogs' kidneys cannot excrete the chemicals of which it is composed. Will the Garlon have a similar negative effect on coyotes who call Glen Canyon and other natural areas home? No one really knows the impact of the herbicides on the wildlife (raccoons, coyotes, possums, etc.) that are currently living in the natural areas, so collateral damage to the environment and its long term effects are as yet unknown. NAP's use of chemical substances is a clear violation of the Precautionary Principle. [Valente-1-03]

- I am also concerned with the use of chemicals, including herbicides like Garlon, which is harmful to dogs. The City should stick with its IPM strategy and emphasize non-chemical methods, or discuss an adaptation strategy for non-natives that considers any ecosystem services they provide. [Vitulano-1-05]
- NAP largely is also a bad policy for the city with their environmental destruction, use of toxic sprays. [PH-Rotter-P-03]

Response HZ-1

These comments focus on the use of pesticides and herbicides by the SFRPD in terms of frequency, application methods, and volumes, toxicity for humans or wildlife, whether SFRPD complies with the requirements of the IPM, and whether use will increase with implementation of the SNRAMP. The comments also express concern for the SNRAMP's proposed use of herbicides within the Glen Canyon Natural Area, and concern that such use could result in impacts to water quality. Some comments point out an error in the Draft EIR regarding the description of Garlon®.

These comments also request information about imazapyr; suggest that the use of imazapyr and glyphosate are inappropriate and unnecessary; question whether the NAP exposes the public to excessive use of dangerous herbicides, such as Garlon Ultra 4® and Roundup®; and questions the measures used to control mosquito and tick populations. These comments express concerns about the safety of pesticide and herbicide use, including potential impacts on canids (i.e., dogs, coyotes, foxes), wildlife, and the public.

The commenters' general concern regarding the proposed use of pesticides and herbicides do not present any evidence that the proposed project would result in significant impacts with respect to the use of pesticides and herbicides.

Use of Pesticides and Herbicides¹⁴⁸

Use of pesticides in the Natural Areas are applied in accordance with the IPM Program, which is codified as an Ordinance, is discussed in detail in Draft EIR Section III.E.5, Management Practices, pp. 90 and 91, and in SNRAMP Chapter 4, Integrated Pest Management, as well as in this response. The purpose of the City's Integrated Pest Management Ordinance is described in Section 300 of the Ordinance as follows: "The Board of Supervisors hereby finds and declares that it shall be the policy of the City and County of San Francisco for City departments and City contractors who apply pesticides to City property to eliminate or reduce pesticide applications on City property to the maximum extent feasible."

The use of pesticides within the Natural Areas are subject to the City's IPM Program, which provides the optimal integration of management methods to control pests with the least possible

¹⁴⁸ Herbicides are a type of pesticide. Pesticides are substances that kill pests, with "pests" meaning a broad spectrum of problems, such as invasive or non-native plants or mosquito or tick larvae.

hazard to people, property, and the environment. Draft EIR pp. 90 and 91 have been revised as follows to further describe the IPM Program and the decisionmaking process that guides the selection of pest-control methods:

IPM is a multistep ecologically based approach that enables staff to make decisions about where, when, and how resources should be best allocated to control pests. Conventional pest control methods attempt to control the symptoms of a pest problem, but IPM is a proactive strategy that focuses on identifying and reducing, or eliminating, the root cause of a pest problem. IPM implements effective, long-term management solutions through the use of a broad range of expertise, a combination of treatment methods, and comprehensive monitoring and evaluation.

In accordance with Chapter 39 of the San Francisco ~~Administrative Environment~~ Code, the Natural Areas Program employs IPM as its strategy for preventing new and managing existing pest infestations. Four general weed management strategies exist: prevention, containment, reduction, and eradication; each of these results in a different level of weed control and reflects available resources. The Natural Areas Program's policy is to use the least-toxic control methods whenever feasible and practical. In addition, to reduce the need for pesticides, manual pest control efforts are employed by a collaborative effort between SERPD employees and volunteers. Apart from the 10 full-time staff that conduct management and maintenance actions within the Natural Areas, the Natural Areas Program also has a robust volunteer program, with individual groups that range in size from 10 to 50 people.

Factors that make manual and/or mechanical methods impractical include:

- Direct threats to human health and safety (e.g., steep, inaccessible, unstable slopes, significant poison oak infestations, etc.);
- Large infestations requiring ongoing repeated strenuous physical labor, such as picking and lifting, that may cause injury to staff, contract field crews, or volunteers; and
- Areas where access, human trampling, or soil disturbance may directly or indirectly damage native plant communities, affect wildlife, or cause soil erosion.

Management methods to be employed by the Natural Areas Program include:

- Physical control methods employed by Natural Areas Program staff and volunteers, which range from hand-pulling weeds to the use of hand and mechanical tools to uproot, girdle, or cut plants;
- ~~Biological~~ Pest control,¹⁴⁹ which, in the case of the Natural Areas Program, involves revegetating cleared areas and introducing native plants in an area to encourage competition with weeds; and
- Chemical control, which involves the use of herbicides to suppress wildland weeds; and, in compliance with the San Francisco Pest Management Ordinance.
- ~~Public education and outreach.~~

¹⁴⁹ Pest control generally involves the management of pests (insects, diseases, weeds) by manipulation of the environment or implementation of preventive practices including using plants that are resistant to pests, raising the mowing height of turf to shade out weeds, aerating turf to reduce compaction and plant stress, or dethatching to remove habitat, food sources and impediments to management.

Only aquatic-specific herbicides (those determined safe for aquatic life) would be applied to wetlands and to areas next to water bodies. The application of herbicides, including Garlon and Roundup, is not allowed within 15 feet of either side of established trails.

As a leader in making choices based on the least environmentally harmful alternatives and challenging traditional assumptions about risk management, numerous City ordinances apply a precautionary approach to specific City purchases and activities, including the Integrated Pest Management Ordinance, the Resource Efficient Building Ordinance, the Healthy Air Ordinance, the Resource Conservation Ordinance, and the Environmentally Preferable Purchasing Ordinance. Internationally, this model is called the “Precautionary Principle.”

The Precautionary Principle requires a careful assessment of available alternatives for products, such as pesticides, which are evaluated through the IPM Program that may have health and environmental impacts. The evaluation process takes short-term versus long-term effects or costs into consideration and evaluates and compares the adverse or potentially adverse effects of each option, giving preference to those options with fewer potential hazards. This process allows fundamental questions to be asked, such as: “Is this potentially hazardous activity necessary?” “What less-hazardous options are available?” and “How little damage is possible?” The Precautionary Principle is described in Chapter 1 of the City’s Environment Code, which is provided in the City’s Municipal Code.¹⁵⁰

As stated in the SNRAMP, and more fully described in this response, the SFRPD employs a least toxic decision-making model for its vegetation management activities, which means that it first uses the least-toxic pest control methods, combining methods as necessary. If more conventional treatment methods are required, and only if the least-toxic pest control methods are unsuccessful, pesticides may be used in a controlled manner and in small quantities as part of routine maintenance in the Natural Areas to control invasive vegetation and other pests. Under the SNRAMP, only herbicides specifically labeled for aquatic use by the United States Environmental Protection Agency would be applied to wetlands and to areas next to waterbodies. Despite the emphasis on hand, mechanical, and alternative methods of removal, pesticides may be necessary to control invasive weeds and other pests (such as mosquitos or ticks) in Natural Areas when other methods are not feasible.

With specific regard to non-weed pests, the Department of the Environment maintains a Reduced Risk Pesticide List that contains pesticides and vector control products that can be used by City staff or contractors when managing pests on City-owned properties. The 2014 Reduced Risk Pesticide List contains a total of 51 general use pesticides, and of those, there are 10 herbicides. There are also pesticides for specific application on golf courses and 7 vector control products for use treating

¹⁵⁰ The San Francisco Municipal Code is current through Ordinance 33-16, File No. 160115, approved March 11, 2016, effective April 10, 2016. The Environment Code was last amended by Proposition H, which was approved by the voters at the election of November 3, 2015.

mosquitoes, ticks, and rodents. It is maintained and updated annually as part of San Francisco's IPM Program. These pesticide products may be used only as a last resort after other, nonchemical management options have been exhausted, as required by the least-toxic decision-making model described in the SNRAMP. According to the SFRPD website,¹⁵¹ over the last 12 years, the NAP has tried hand weeding to control a handful of invasive species, but found that hand removal does not always fully and effectively remove aggressive invasive species.

Each of the products on the list has been (1) screened using the San Francisco Pesticide Hazard Screening Protocol; (2) reviewed by the San Francisco IPM Technical Advisory Committee (IPM TAC – the IPM TAC is convened by the Department of the Environment and is composed of City IPM Coordinators, contractors, IPM specialists from non-City agencies, and other interested parties. Each year the TAC considers product hazards, potential for exposure, data gaps, and existence of safer alternatives before placing products on the List.); (3) presented at a public hearing; and (4) approved by the Commission on the Environment. The SFRPD is a member of the Department of Environment's IPM Technical Advisory Committee.

The toxicity of the pesticides is thoroughly evaluated through a hazard assessment conducted by an independent toxicologist prior to being placed on the Reduced Risk Pesticide List.

City departments must request a temporary exemption in order to use a pesticide that is not listed on the Department of the Environment's current Reduced Risk Pesticide List. Prior to granting or denying a temporary exemption, the Department of the Environment reviews a written justification for the exemption and determines if the request would present an unacceptable risk to public health and safety or the environment. Each request for exemption must contain a written justification, which is thoroughly reviewed by the Department of the Environment, with exemptions only granted when there is a well-documented need for the pesticide and all other alternatives have been tried and deemed impractical or for the trial use of new reduced-risk products. If the exemption is approved, any limitations necessary to protect public health and safety and the environment are detailed. Typical limitations include the date range, location, and methods of application that are approved. Pesticide applications covered by an approved exemption are not considered violations of the IPM Ordinance.

Since the publication of the Draft EIR, the Reduced-Risk Pesticide List has been updated and it is expected that this list will continue to be revised as information becomes available and better products are introduced into the market. All pesticides and herbicides currently used by the NAP are listed on the 2014 San Francisco Reduced-Risk Pesticide List and, as the list is updated, the NAP will continue to use pesticides and herbicides listed on the most current San Francisco Reduced-Risk Pesticide List, unless they request and receive an exemption. More detailed information about the

¹⁵¹ <http://sfrecpark.org/parks-open-spaces/natural-areas-program/natural-areas-faqs/>, accessed on November 11, 2015.

pesticides currently used in the NAP is provided below, in the section entitled “Specific Types of Pesticides Currently Used in the Natural Areas.”

Summary of EIR Conclusions Relative to Pesticide Use

Draft EIR p. 392 (in Impact HZ-7) concluded that a less-than-significant impact would occur with respect to hazardous conditions occurring as a result of the application of pesticides for vegetation control because: (1) only aquatic-specific herbicides would be applied in or next to waterbodies; (2) pesticides and herbicides would be implemented only when other means, such as physical or biological control, would not be sufficient; (3) pesticides (including herbicides) would only be applied by trained personnel in a manner consistent with the manufacturer’s label; (4) the public would be alerted of a scheduled application by posting a notice in a prominent location three days before the application and for four days after the application; (5) all use of pesticides would be recorded by the SFRPD and forwarded to the San Francisco Department of the Environment; and (6) the NAP would use pesticides that are the least toxic option that effectively controls the weed.

Draft EIR Section V.G, Biological Resources, pp.294 to 333, evaluates impacts on biological resources due to pesticide and herbicide use, as follows: Impacts BI-1 (impacts on special-status species, Draft EIR p. 295); BI-2 (impacts on special-status bird species, Draft EIR pp. 304 to 305); BI-4 (impacts on special-status aquatic species, Draft EIR pp. 309 to 312); and BI-7 (impacts on sensitive natural communities, Draft EIR pp. 330 to 331). The Draft EIR concludes that all impacts could be mitigated to a less-than-significant level. With respect to vegetation, pesticides would be specifically applied to invasive, nonnative vegetation and would not be used on special status plants or sensitive natural communities. Further, the SFRPD would adhere to the City’s IPM Program, which requires that pesticide use in the Natural Areas be applied in as little quantities as possible to achieve the desired results; the application would be carefully monitored; and the SFRPD would use the least toxic methods and materials that are appropriate for the environment in which they are applied. Due to the low toxicity of the pesticides that would be applied, Draft EIR p. 305 concluded that accumulation in the environment would not likely result in adverse impacts to protected bird species, and the removed vegetation would be replaced with native vegetation, which provides higher quality habitat.

The potential effects of pesticide use, including Garlon® on biological resources are addressed in the following sections of the Draft EIR: Impact BI-1, on Draft EIR p. 295, impacts on special-status plant species; Impact BI-2, on Draft EIR pp. 304 to 305, impacts on special-status bird species; and Impact BI-4, Draft EIR pp. 309 to 312, impact on special-status aquatic species.

Similar to the analysis of impacts to biological resources, in Section V.H, Hydrology and Water Quality, Draft EIR p. 365 concludes that pesticide use in the Natural Areas would have less-than-significant environmental impacts to water quality because SFRPD would use as little pesticide as possible to achieve the desired results; its application would be carefully monitored; it would involve the use of the least toxic methods and materials that are appropriate to the environment in

which they are applied; and it would adhere to the requirements of the IPM Program, as well as any applicable federal, state, and county pesticide regulations. Further, as also stated on Draft EIR p. 92 “Only aquatic-specific herbicides (those determined safe for aquatic life) would be applied to wetlands and to areas next to water bodies.” Therefore, the Draft EIR determined that impacts related to pesticide use near waterbodies, such as the stream that runs through Glen Canyon Park, would be reduced to a less-than-significant level.

As described in Draft EIR Section V.I.2, Environmental Setting, and Section V.I.3, Impacts (in Impacts HZ-7, HZ-9, and HZ-11 on Draft EIR pp. 391 through 393), the SNRAMP employs several measures to ensure that pesticide application does not endanger public health and safety in terms of the exposure to hazardous conditions. Among these are following the manufacturer’s label, posting notices of pesticide application, and adhering to the requirements of the IPM Program and IPM Ordinance, as well as any applicable federal, state, and county pesticide regulations. Further, as previously stated, the SFRPD employs a least toxic decision-making model for its vegetation management activities, which means that it first uses the least-toxic pest control methods, combining methods as necessary.

The CEQA analysis provided in the Draft EIR compares the baseline (or existing conditions) at the project site, with the potential environmental impacts that would result from the proposed project; it does not analyze the impacts of current practices, except where they may appropriately be considered in a cumulative impact analysis. Pesticide use under the SNRAMP is expected to be substantially similar to the current use of pesticides in Natural Areas since the existing controls would continue to be in place.

In summary, the IPM Program promotes nonchemical control strategies. Where pesticides must be used, an additional layer of precaution is provided by the Department of the Environment’s IPM Program. Only pesticides specifically allowed Department of the Environment on the Reduced Risk Pesticide List, which is published by the Department of the Environment and updated annually by San Francisco’s IPM Program, can be used, unless an exemption is granted. Further, the IPM Ordinance requires that herbicide applicators are trained and are required to follow the manufacturer’s label when applying pesticides. Signs alerting the public of a scheduled spray must be posted in a prominent location three days before the application and must remain posted for four days after the application. Lastly, any use of pesticides or herbicides must also follow the manufacturer’s label, adhere to limitations stipulated by the San Francisco Department of Environment, and comply with all federal, state, and county pesticide regulations.

Specific Types of Pesticides Currently Used in the Natural Areas

Of the pesticides identified on the Reduced-Risk Pesticide List, the NAP currently (as of 2014) uses four types of pesticides or herbicides; glyphosate (AquaMaster®), imazapyr (Habitat® and Stalker®), triclopyr (Garlon 4 Ultra®), and aminopyralid (Milestone®). As previously mentioned, since the Draft EIR was written, the Reduced-Risk Pesticide List has been updated and it is expected

that this list will continue to be revised as information becomes available and better products are introduced into the market. As the list is updated, the NAP will continue to use pesticides and herbicides listed on the most current San Francisco Reduced-risk Pesticide List, unless they request and receive an exemption.

According to SNRAMP p. 4-5, in 2004, the NAP used less than 10 percent of the overall SFRPD herbicide usage (P. Rossi, pers. comm. 2005), although the Natural Areas account for approximately 25 percent of the land managed by the SFRPD. Based on information provided in the Department of the Environment's database, in 2011, approximately 1.3 pounds of triclopyr were used in the Natural Areas as compared to 21.6 pounds of triclopyr that were used by SFRPD throughout the land it manages, which represents only 6 percent of the total triclopyr usage. Overall, the Natural Areas use the lowest amount of pesticides (at 4 percent) as compared to other divisions within SFRPD, despite accounting for over 40 percent of the parkland under SFRPD control.¹⁵² Further, while the number of applications may have increased, the total use of glyphosate, triclopyr, imazapyr, and aminopyralid has substantially declined since 2003, with all three pesticides being used at levels of less than 4 pounds per year each, and imazapyr and aminopyralid being used at levels of less than 1 pound per year each.¹⁵³ Also, it is the practice of the SFRPD to use herbicides in Natural Areas and parks as a last resort to combat invasive weeds.

In response to the comments about pesticide/herbicide use and safety, as indicated in RTC Section 5.A, Changes in Response to Comments, the text on Draft EIR p. 386 (after the first full paragraph) has been changed as follows, to provide more information about the Reduced-Risk Pesticide List:

San Francisco's IPM Program maintains a Reduced Risk Pesticide List that is updated annually. It is a list of the only pesticides approved for use on City-owned property without an approved exemption. In addition to an initial screening by the EPA, each pesticide on the list goes through a four-step screening process prior to being added to the list:

1. First, it is screened using the San Francisco Pesticide Hazard Screening Protocol, which is available on the San Francisco Department of the Environment's website at <http://sfenvironment.org/article/pest-management/managing-pests-on-City-properties>. This screening includes a hazard assessment and an exposure assessment.
2. Second, it is reviewed by the San Francisco IPM Technical Advisory Committee, which is composed of City IPM Coordinators, contractors, IPM specialists from non-City agencies, and other interested parties. Each year, the committee considers product hazards, potential for exposure, data gaps, and existence of safer alternatives before placing products on the Reduced Risk Pesticide List.
3. Third, it is presented at a public hearing, where the public is invited to comment.

¹⁵² San Francisco Department of the Environment. *Pesticide Use in Significant Natural Areas, San Francisco Recreation and Park Department*. 2014.

¹⁵³ San Francisco Department of the Environment. *Pesticide Use in Significant Natural Areas, San Francisco Recreation and Park Department*. 2014.

4. Finally, the Commission on the Environment approves or rejects its inclusion on the Reduced Risk Pesticide List.

City Departments must request a temporary exemption in order to use a pesticide that is not on the San Francisco Department of the Environment's current Reduced Risk Pesticide List. Each request for exemption must contain a written justification that is thoroughly reviewed by the San Francisco Department of the Environment, which will only grant exemptions when there is a well-documented need for the pesticide and when all other alternatives have been tried and deemed impractical or for the trial use of new reduced risk products. If the exemption is approved, any limitations necessary to protect public health and safety and the environment are detailed. Typical limitations include the date range, location, and methods of application that are approved. Pesticide applications covered by an approved exemption are not considered violations of the IPM Ordinance.

Text will also be added to the Draft EIR to clarify the discussion concerning the difference between the current use of pesticides and use of pesticides as a result of implementation of the SNRAMP. The text on Draft EIR p. 391 has been modified, as indicated in RTC Section 5.A, Changes in Response to Comments, p. 5-1, as follows:

The amount and frequency of pesticide applications as a result of implementation of the SNRAMP would be similar to what currently occurs within the NAP areas and what has occurred over the past 10 years. Although it will sometimes be necessary to treat vegetation with pesticides containing active ingredients such as glyphosate, triclopyr, imazapyr, and aminopyralid after removal, vegetation removal activities would occur gradually over time (over 20 years). Pesticide use would fluctuate from year to year, as it does now, for multiple reasons, including the vegetation to be removed, the timeframe of those projects, weather, and the number and types of pests present.

The SFRPD acknowledges that mistakes have been made in the past with respect to pesticide application and posting; however, once discovered, the circumstance has been fully corrected. SFRPD complies with all applicable laws and regulations, as well as the IPM Ordinance; therefore, the Draft EIR assumes compliance with applicable laws and regulations, as well as the IPM, in implementation of the SNRAMP. As discussed on Draft EIR pp. 385 and 391, it is the NAP's policy to comply with San Francisco's IPM Ordinance. In addition, the NAP must comply with state and federal pesticide regulations; therefore, future compliance is assumed.

Use and Toxicity of Garlon 4 Ultra®, AquaMaster®, and Imazapyr

Based on information provided in the Department of the Environment's database, in 2011, approximately 1.3 pounds of triclopyr (under the product name Garlon®) were used in the Natural Areas as compared to 21.6 pounds of triclopyr that were used by SFRPD throughout the land it manages, which represents only 6 percent of the total triclopyr usage. SFRPD does not use Garlon® in or near lakes, waterbodies, or streams, consistent with the manufacturer's recommendations. Further, Garlon® is being phased out from use in Natural Areas and is only used for invasive plants in biologically diverse grasslands due to its target specificity. As described in Draft EIR Section III.E.5, only aquatic-specific herbicides, such as AquaMaster®, would be applied to wetlands and to areas next to waterbodies.

With respect to the Draft EIR statements concerning Garlon®, there are two Garlon® products, Garlon 3® and Garlon 4 Ultra®, with different forms of the active ingredient triclopyr. SFRPD previously used Garlon 3® for terrestrial applications (and Garlon 3® was being used when the Draft EIR was distributed for public review); however, SFRPD is presently using Garlon 4 Ultra® for terrestrial applications. Garlon 4 Ultra® provides better control of invasive, woody plants and herbaceous broadleaf weeds than Garlon 3®, and it contains no petroleum distillates; however, it cannot be used in aquatic environments (for that purpose, other pesticides, such as AquaMaster®, are used).

It appears the commenters claims were based on information for Garlon 4 Ultra®. The active ingredient in Garlon 4 Ultra® is triclopyr-2-butoxyethyl ester (BEE). BEE is considered to be toxic to aquatic organisms and, therefore, is not recommended for use in aquatic environments or in proximity to aquatic environments. Also, application is recommended during dry weather conditions, when migration to an aquatic environment is unlikely. BEE is registered for residential uses, such as on turf, and has low toxicity to humans and most animals.

BEE degrades rapidly (within hours to several days) through exposure to sunlight and by microbial degradation in soils. If applied away from aquatic environments and during dry weather periods, BEE is not expected to pose a significant threat to the environment. Extensive literature is available regarding the use and effects of BEE. Sources include the United States Environmental Protection Agency's Registration Eligibility Decision (RED) document (EPA 1998); the EPA's report on the risks of triclopyr use to red-legged frogs (EPA 2009), and the National Marine Fisheries Service biological opinion on the effects of BEE on endangered species (NMFS 2011). A risk assessment for triclopyr prepared for the US Forest Service¹⁵⁴ also contains a detailed literature review (Durkin 2003).

Based on the Material Safety Data Sheet (MSDS) for Garlon 4 Ultra® (dated May 17, 2015),¹⁵⁵ some of the commenters claims did not appear in the most recent MSDS; however, as the commenter mentioned, and as affirmed in this response, the MSDS for Garlon 4 Ultra® did indicate that it is

¹⁵⁴ Revised Human Health and Ecological Risk Assessments Final Report, Prepared for: USDA, Forest Service, Forest Health Protection, GSA Contract No. GS-10F-0082F, USDA Forest Service BPA: WO-01-3187-0150, USDA Purchase Order No.: 43-1387-2-0245, Task No. 13, Submitted to: Dave Thomas, COTR, Forest Health Protection Staff, USDA Forest Service, Rosslyn Plaza Building C, Room 7129C, 1601 North Kent Street, Arlington, VA 22209, Submitted by: Patrick R. Durkin, Syracuse Environmental Research Associates, Inc., 5100 Highbridge St., 42C, Fayetteville, New York 13066-0950, March 15, 2003. This document is available online at: www.fs.fed.us/r5/hfqlg/.../2003_triclopyr.pdf, accessed June 7, 2016.

¹⁵⁵ http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0CCUQFjABahUKEwisl8jwvLjHAhXIK4gKHR_NDCA&url=http%3A%2F%2Fwww.cdms.net%2FLDat%2Fmp7IN012.pdf&ei=QDXWVaz3KMjXoASfmrOAAg&usq=AFQjCNEUIBsjkXuW2xmndMWP3GXLUpxzIQ&sig2=IXLHxqrQrjXxJ41ir7ikRw, accessed on August 20, 2015.

highly toxic to aquatic organisms on an acute basis to the most sensitive species tested. The company that manufactures Garlon®, Dow AgroSciences, indicates that:¹⁵⁶

As you can see in the Exposure Assessment Chart above, there's a large margin of safety for birds. However, you'll find no additional margin of safety figures of aquatic organisms. This reflects laboratory studies showing that triclopyr applied directly to water and artificially maintained for 96 hours at a concentration equal to 2 quarts per acre, in a 1-foot-deep stream or pond, is potentially harmful to aquatic organisms.

Scientists conducting field trials in a natural aquatic setting find it's impossible to maintain that laboratory concentration for 96 hours due primarily to natural degradation of the active ingredient. These study results for Garlon 4 Ultra show that the moderately toxic ester formulation quickly converts to the practically nontoxic technical acid within a few hours. In other words, even intentional applications to water in outdoor field trials did not reach toxic levels for the length of time necessary to cause harm.

Although these aquatic studies indicate some margin of safety, label directions do not permit Garlon 4 Ultra to be applied to water. In addition, the label directions specify a buffer zone (land where no herbicide can be applied) be left between the application site and any lakes, rivers or streams to add an extra measure of protection.

The SFRPD uses Garlon 4 Ultra® in accordance with the instructions for its use, and Garlon 4 Ultra® is only applied by appropriately-trained personnel. All precautions are taken to protect workers, visitors, and the environment, including avoiding applications near aquatic environments. While care must be taken to avoid exposure to high concentrations of the herbicide (such as might impact workers mixing or handling the product), the active ingredient in Garlon 4 Ultra®, BEE, is not toxic to humans at the concentrations expected to be present shortly after the applications are completed.

The UCSF also prepared a Mount Sutro Herbicide Risk Assessment¹⁵⁷ to determine, in part, the risks associated with using two herbicides (AquaMaster® and Garlon 4 Ultra®). This report concludes that by adhering to specific application guidelines and improvement measures outlined in the Mount Sutro Management Project Draft EIR, the probability of an accidental spill is considered improbable to highly improbable. The likelihood that the general public or wildlife could be exposed to hazardous conditions is largely improbable, although certain exposures (e.g., dermal contact by the public wearing shorts or wildlife consumption as 30 percent of diet) are possible. The likelihood for contamination after peak herbicide runoff is probable.

As stated on page 1-21 of the UCSF Mount Sutro Herbicide Risk Assessment (provided in Appendix G of the Mount Sutro Management Project Draft EIR), herbicide applicators are likely to have the

¹⁵⁶ http://msdssearch.dow.com/PublishedLiteratureDAS/dh_08b7/0901b803808b7d68.pdf?filepath=ivm/pdfs/noreg/010-50546.pdf&fromPage=GetDoc, accessed on August 7, 2014.

¹⁵⁷ Pesticide Research Institute, *University of California San Francisco (UCSF) Mount Sutro Herbicide Risk Assessment*, April 25, 2012, pp. 1-20 and 1-21. This document is included as Appendix G to the Mount Sutro Management Project Draft EIR.

highest exposures, since they would be working directly with the chemicals. Visitors to Mount Sutro could be exposed through contact with treated plants or nearby soils, rocks, and logs. Terrestrial wildlife could be exposed through direct spray contact, by eating contaminated food or drinking contaminated water, and through contact with treated surfaces; aquatic organisms could be exposed if herbicides are spilled into puddles, pools, or ruts, or if runoff of herbicide-contaminated water from treated sites occurs. The hazard quotient for the most likely exposure scenario for someone who wears contaminated gloves for one minute (an event that is considered to be likely to occur for workers applying herbicide) is 0.000021, which is less than one hundredth of one percent of the reference dose of 2 mg/kg-day. The Mount Sutro Management Project Draft EIR concluded that the use of herbicides would result in less-than-significant project-related and cumulative impacts on human health, terrestrial wildlife species, aquatic wildlife, water quality, and vegetation. By comparison, at Mount Sutro, Garlon® is used at an application rate of one to four quarts per acre, whereas in the 1,107 acres of the Natural Areas, during all of 2004, less than 8 quarts were used (refer to SNRAM p. 4-5).

To determine potential impacts of triclopyr on canids (i.e., dogs, coyotes, foxes), the SFRPD retained the Pesticide Research Institute to conduct a United States Forest Service (USFS) risk assessment to determine the hazard potential.¹⁵⁸ The Pesticide Research Institute used the acute and chronic worksheets for a large mammal, changing the coefficients to match those of a canid, instead of an herbivore, and changing the weight of the animal to 30 kilograms (kg).

The HQ is the ratio of the expected intake of the chemical (for a particular exposure scenario, such as acute or chronic) divided by the toxic reference value for that chemical (TRV). Essentially, the HQ provides the threshold for each exposure scenario. To exceed a HQ of 1, which is the chronic toxicity threshold, a 30 kg (or 66 lb) dog would have to eat 2.1 kg (4.63 lbs) of grass per day, if the grass were treated at 1 lb/acre. For a treatment rate of 9 lbs/acre, the same dog would have to eat 0.22 kg (or 0.48 lbs) of grass per day. By comparison, the NAP uses less than 2 gallons (or 16.7 pounds) of Garlon 4 Ultra® over the 1,100 acres represented by the NAP, which translates to a treatment of 0.02 lbs/acre. Therefore, a 30 kg dog would have to eat far more grass per day (at least 232 lbs per day) in order to experience a chronic or acute reaction.

In addition, as indicated in RTC Section 5.A, Changes in Response to Comments, the text on Draft EIR p. 392 (lines 26 to 29) has been changed, as follows:

Further, the Natural Areas Program would use pesticides that are the least toxic option that effectively controls the weeds. Because the application of herbicides are applied following IPM guidance, as well as the fact that staff remain onsite until the application has dried and it is safe to re-enter the area, dogs that are walked on leash as required by SFRPD rules would not risk an unsafe level of exposure to herbicides.

¹⁵⁸ Email from Dr. Susan E. Kegley, Pesticide Research Institute, to Stacy Bradley, SFRPD, and Terri Avila, ESA, entitled "Dog Eating Grass," June 8, 2016.

~~Therefore, For the reasons stated above,~~ impacts from applying herbicides as part of the IPM for programmatic projects under the SNRAMP would be *less than significant*.

Comments suggesting that SFRPD uses Garlon® to control eucalyptus are incorrect; as previously mentioned, SFRPD applies Garlon® only to control grasslands. Further, as described in Draft EIR Section III.E.5, Management Practices, p. 91, only aquatic-specific herbicides would be applied to wetlands and to areas next to waterbodies.

With regard to imazapyr, and whether it was mentioned in the Draft EIR, p. 365 states that the primary herbicides used by the SFRPD in the Natural Areas are glyphosate (under the trade name AquaMaster®), imazapyr (Habitat® and Stalker®), triclopyr (Garlon 4 Ultra®), and aminopyralid (Milestone®).

The Human Health and Ecological Risk Assessment for Imazapyr (as prepared by Syracuse Environmental Research for the United States Department of Agriculture, Forest Service) states the following in terms of toxicity:¹⁵⁹

“While adverse effects on plants may be anticipated, there is no basis for asserting that applications of imazapyr will pose any substantial risk to humans or other species of animals. The U.S. EPA/OPP classifies imazapyr as practically non-toxic to mammals, birds, honeybees, fish, and aquatic invertebrates. This classification is clearly justified. None of the expected (non-accidental) exposures to these groups of animals raise substantial concern; indeed, most accidental exposures raise only minimal concern. The major uncertainties regarding potential toxic effects in animals are associated with the lack of toxicity data on reptiles and amphibians.”

While the NAP still uses glyphosate, imazapyr, triclopyr, and aminopyralid, which are the chemical names for the herbicides that are used, the specific products that the NAP uses may vary (e.g., AquaMaster is currently used, rather than Roundup or Rodeo), with the NAP always striving to use the least toxic pest control methods, as previously mentioned. Further, product names can change, as well. Therefore, as indicated in RTC Section 5.A, Changes in Response to Comments, the text on Draft EIR p. 365 (second full paragraph) has been changed to address the comments above, as follows:

The primary herbicides used by the SFRPD in the Natural Areas are glyphosate (under the trade names ~~Roundup, Aquamaster, and Rodeo~~), imazapyr (Habitat and ~~Polaris~~Stalker), triclopyr (Garlon), and aminopyralid (Milestone). Glyphosate, ~~the primary product used~~, is a broad spectrum, nonselective systemic herbicide that is effective against weeds; it has low toxicity to wildlife but moderate toxicity to fish (Monsanto 2005). ~~Roundup~~Aquamaster binds tightly to soil, which reduces the potential for migration to surface water or groundwater. Garlon is a selective systemic herbicide that controls broadleaf weeds without harming grasses. ~~It~~ Two forms of Garlon are currently available: Garlon 3 and Garlon 4 Ultra. The SFRPD has used Garlon 3 in the past and

¹⁵⁹ Syracuse Environmental Research Associates, *Imazapyr, Human Health and Ecological Risk Assessment, Final Report*, December 16, 2011.

is currently using Garlon 4 Ultra. Each contains a different form of the active ingredient triclopyr. The form present in Garlon 3 degrades quickly in the environment and has low toxicity to aquatic species (Dow 2009). The active ingredient in Garlon 4 Ultra is triclopyr-2-butoxyethyl ester (BEE). BEE is considered to be highly toxic to fish and aquatic organisms and therefore is not recommended for use in aquatic environments or in proximity to aquatic environments. BEE degrades rapidly (within hours to several days) through exposure to sunlight and by microbial degradation in soils. If applied away from aquatic environments and during dry weather periods, BEE is not expected to pose a significant threat to the environment. Extensive literature is available regarding the use and effects of BEE. Sources include the EPA's Registration Eligibility Decision (RED) document (EPA 1998); the EPA's report on the risks of triclopyr use to red-legged frogs (EPA 2009), and the National Marine Fisheries Service biological opinion on effects of BEE on endangered species (NMFS 2011). A risk assessment for triclopyr prepared for the US Forest Service also contains a detailed literature review (Durkin 2003).

The SFRPD and the San Francisco Department of Environment are looking at alternatives to Garlon is being phased out from for use in the Natural Areas; however, and is only used for invasive plants in biologically diverse grasslands due to its target specificity. As described in Section III.E.5, only aquatic-specific herbicides, such as Rodeo, Aquamaster, and Habitat would be applied to wetlands and to areas next to water bodies.

While the above text has been changed in the Draft EIR, which represents the portion of the document that most specifically addresses the pesticides and herbicides used in the Natural Areas, the Draft EIR includes numerous other references to products that are no longer used (e.g., Rodeo or Roundup) and product names that may have changed (e.g., Garlon 3® to Garlon 4 Ultra®); however, the chemicals that are used remain the same (glyphosate, imazapyr, triclopyr, and aminopyralid). Further, as previously mentioned, while the specific products that the NAP uses may vary and the product names may change, the NAP strives to use the least toxic pest control methods. Therefore, the Draft EIR has not been revised to change every reference to product names.

Mosquito and Tick Populations¹⁶⁰

The NAP's procedures for controlling mosquito and tick populations and eliminating breeding habitat are described in Draft EIR Section V.I.2, Environmental Setting, under the subheading "Mosquito and Tick Control." Specifically, Draft EIR p. 386 states that "The San Francisco Department of the Environment implements the San Francisco IPM program to control mosquitoes and to prevent insect-borne diseases, including the West Nile virus. The city's program emphasizes the elimination of breeding habitat and the use of least-toxic larvicides to target mosquitoes at their most vulnerable stage, before they emerge as adults (San Francisco Department of the Environment 2005)."

The impacts of the proposed project on mosquito and tick control would be less than significant as concluded in Section V.I.3, Impacts, Impact HZ-2, Impact HZ-4, and Impact HZ-6 for the same reasons as identified for the use of pesticides, which are previously addressed in this response.

¹⁶⁰ Similar to an herbicide being a form of a pesticide (with the "pest" considered unwanted vegetation), a larvicide is also a form of a pesticide (with the "pest" considered mosquito or tick larvae).

Comment HZ-2 Public safety impacts from closure and relocation of dog play areas

The response to Comment HZ-2 addresses all or part of the following individual comment:

SFDOG-2-19

- The NAP EIR does not consider the impact on public safety if DPAs are closed, and especially if 80% of the legal off-leash space is ultimately closed. People with dogs are major park users in nearly every park. They are in the parks at all hours of the day (and often into the night), in rain or shine. Public safety officials have known for years that a well-used park is a safe park. People (and especially those with dogs) convince drug dealers, gang bangers, rapists, robbers and other “bad actors” to go somewhere else to commit their crimes. By kicking out people with dogs, the parks will have significantly fewer people in them, and criminals will have less fear of being observed. Prospect Park in New York City was a well known drug dealing haven in the early 1970s (there were even movies made about it). In an article in the September 29, 2005 edition of the New York Daily News, Tupper Thomas, who was appointed the New York City Parks Administrator in 1980, was quoted as saying, “Everybody was terrified of Prospect Park. I remember going around to several schools with a park ranger and telling the principals that if they brought their schoolchildren to the park, I would assign them their own personal ranger to make sure nothing happened to them.” Today, Prospect Park hosts several million visitors annually. According to the article, dogs deserve a lot of the credit for the turnaround. Despite the threat of muggings, people with dogs still used the park. In 1982, the NYC Parks Department started ticketing people with dogs in Prospect Park. They complained and in response, the Parks Department came up with a timed-use policy – dogs could be off-leash in the park from 9 pm to 9 am. In the article Thomas goes on to say, “That dog group became a symbol that it was safe to come to the park. It made an enormous difference. Runners started seeing people in the park, so people started running in the park rather than around it. Over time, because there were people coming to the park, the park came back to the people.” The NAP EIR has to consider the negative impacts on public safety of forcing major park users out of large portions of city parks, especially with the potential 80% closures of DPAs. Force the people with dogs out, and there will be no one in the parks to challenge the drug dealers, gang bangers, and others who pose a real public safety threat, and the parks will ultimately become less safe. [SFDOG-2-19]

Response HZ-2

This comment relates to whether the closure or relocation of DPAs would result in secondary impacts related to public safety.

The commenter incorrectly states that 80 percent of the legal off-leash space would be ultimately closed. Instead, as stated in Response G-25, RTC p. 4-106, and as reflected in Draft EIR Table 5 (p. 114), 20 percent (or 19.3 acres of the 95.2 total acreage of DPAs) of off-leash DPAs would be converted to native habitats. Approximately 75.9 acres of DPAs within Natural Areas would remain.

Instead, dogs are welcome, on leash, at all SFRPD parks. In fact, within the 31 parks that contain Natural Areas within San Francisco and at Sharp Park, there are a total of approximately 2,724 acres of parkland that would be available for on-leash dog use (refer to Table 5 of the Draft EIR), and additional park acreage is available at other parks throughout the city. Further, approximately 75.9 acres of off-leash DPAs would also be available. The number of park visitors walking dogs on-leash would be expected to be similar to current levels or increase in parks near DPAs that were closed or reduced in size. Therefore, to the extent that the current use of Natural Areas by visitors (some with dogs) provides a deterrent to crime, the activities proposed under the SNRAMP would not present a change in conditions (such as visitorship) that would be expected increase or decrease crime.

As discussed in Draft EIR Section V.F.2, Environmental Setting, recreation activities that take place in Natural Areas include walking, hiking, running, dog walking, and nature watching. Of the individuals surveyed for a 2004 SFRPD Recreation Assessment, 67 percent participated in running or walking, the highest percentage for any of the 26 activities identified in the survey. Other activities that San Francisco residents participate in included visiting nature areas (61 percent, second on the activities list), bicycling (38 percent, fifth on the activities list), volunteering (22 percent, tenth on the activities list), and dog walking (20 percent, twelfth on the activities list). Based on this usage information, it is not reasonable to conclude that the closure of some DPAs would reduce overall park visitation substantially such that a public safety hazard would result. Further, the SNRAMP has an express goal related to public safety; as stated on SNRAMP p. 2-2, one of the goals of the SNRAMP is “To design and maintain landscapes that promote public safety.”

Comment HZ-3	Concerns regarding contaminated sites
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The response to Comment HZ-3 addresses all or part of the following individual comment:

Valente-1-04

- NAP refuses to prioritize legitimate safety issues over habitat creation. NAP proposals for Lake Merced and Sharp Park make no mention of the need for toxic lead waste cleanup as part of any rehabilitation of these parks. In both cases, there is toxic lead in the soil in old rifle range areas that currently endangers wildlife and water quality. At Sharp Park, SFRPD has been promising cleanup since 1994, often citing the expense as a factor preventing completion of this task. How is it SFRPD justifies spending millions of dollars “reinventing” our parks to suit the desires of a few native plant enthusiasts, while toxic waste is allowed to persist in damaging our environment? [Valente-1-04]

Response HZ-3

This comment expresses a concern about whether there is a need for toxic lead waste cleanup at Lake Merced and Sharp Park in association with restoration activities.

As discussed in Draft EIR Section V.I.2, Environmental Setting, the corrective action for lead-contaminated soil at the former rifle range in Sharp Park has been completed. Therefore, as indicated in RTC Section 5.A, Changes in Response to Comments, the text on Draft EIR p. 387 (last paragraph) has been changed, as follows:

The SFRPD used to maintain a rifle range in Sharp Park. This facility has been closed for over 13 years. Located near the archery club, this facility is outside of the Natural Areas at Sharp Park. A soil and groundwater investigation identified the presence of lead, polycyclic aromatic hydrocarbons, antimony, and arsenic in soil in an area covering approximately 4 acres; groundwater was not impacted (DTSC 2009). The Department of Toxic Substances Control issued a Notice of Exemption on August 5, 2009, for the removal action work plan for consolidation of lead-contaminated soil at the former Sharp Park Rifle Range. Implementation of the work plan involves the excavation of approximately 12,000 to 16,000 cubic yards of contaminated soil, which would be placed on-site and covered with imported clean soil (DTSC 2009). These cleanup and remediation activities have been were completed in January 2011. Contaminated soil in the area was excavated, consolidated onto a 1.35-acre portion of the site, and covered with 2 feet of clean soil to prevent exposure to contaminants. SFRPD will continue to monitor and periodically report to the Department of Toxic Substances Control on the effectiveness of this corrective action.

The Pacific Rod and Gun Club, which is closed at this time, was located on the western side of the South Lake of Lake Merced, outside of the Natural Areas boundary. The site was subject to a recent soil remediation project. As a result, the text on Draft EIR p. 387 (following the last paragraph) has been changed, as follows, to reflect the new information that became available in March 2016 regarding the Pacific Rod and Gun Club Upland Soil Remedial Action Project:

The San Francisco Public Utilities Commission (SFPUC) has completed the Pacific Rod and Gun Club Upland Soil Remedial Action Project, which included the remediation of upland¹⁶¹ soil contamination at the former Pacific Rod and Gun Club (PRGC) site in compliance with RWQCB Order No. R2-2013-0023. The site is located on the southwest side of Lake Merced. The City and County of San Francisco own the approximately 10-acre property, which is managed by SFPUC. SFPUC had leased the site to the PRGC, which had built and operated skeet and trap shooting facilities there since 1934.

On March 4, 2016, final site inspections were conducted with respect to the completion of the remediation project; however, the Contractor is still maintaining the newly planted vegetation, and restored wetlands and is also required to ensure that the site is stable with respect to stormwater management before the project is deemed entirely complete.

In completing the remediation aspects of the project, the following objectives have been achieved:

- Achieve the highest cleanup standards to minimize the risk of human exposure to elevated concentrations of lead, PAHs, and arsenic in site soils; this would avoid restrictions on site use and additional ongoing monitoring and maintenance requirements
- Reduce the potential for leaching of contaminants into Lake Merced

¹⁶¹ Upland refers to the elevated areas lying above the level where water flows or where flooding occurs.

A Final Mitigation Negative Declaration (Case No. 2013.1220E) was published on October 23, 2014, which indicated that all impacts would be less than significant or mitigated to a less-than-significant level.

For the reasons documented in Draft EIR Section V.I.2, Environmental Setting, as revised based upon the cleanup information provided for the Sharp Park Rifle Range and the Pacific Rod and Gun Club, and the analysis provided in Impact HZ-8, Impact HZ-10, and Impact HZ-12, soils contaminated with lead are outside the Natural Areas, and there would be no impact with respect to disturbing lead-contaminated soil. Further, the clean-up activities at both Sharp Park and Lake Merced are occurring as part of separate projects, unrelated to the SNRAMP.

Comment HZ-4	Disagree with Draft EIR explanation of vegetation and fire hazards
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The response to Comment HZ-4 addresses all or part of the following individual comments:

SFFA-3-25

Burgard-1-02

Hess-1-04

Hovland-1-02

McAllister-2-01

McAllister-2-02

■ **1. Non-native vegetation, including eucalyptus is NOT inherently more flammable than native vegetation**

The DEIR makes the following claims:

- > "... maximize indigenous vegetation for fire control." (DEIR, page 78)
- > "... vegetation with high fire hazard ratings such as broom and eucalyptus." (DEIR, page 111,396)
- > "... replacing highly flammable eucalyptus trees with more fire resistant species." (DEIR, page 410)

Fear of fire has fueled the heated debate about native plant restorations in the Bay Area. Native plant advocates want the public to believe that the non-native forest is highly flammable, that its destruction and replacement with native landscapes would make us safer. Nothing could be further from the truth. The fact is that the forest-whether it is native or non-native-is generally less flammable than the landscape that is native to California. In the specific case of the Sutro Forest in San Francisco, this general principal is particularly true: the existing forest is significantly less flammable than the landscape that is native to that location.

The "Mount Sutro Management Plan" was written by UCSF and is available on their website. It describes "native" Mount Sutro as follows: "In the 1800s, **like most of San Francisco's hills**, Mount Parnassus [now known as Mount Sutro] was covered predominantly with coastal scrub chapparal [sic], consisting of native grasses, wildflowers, and shrubs ..." (page 4) (emphasis added)

A Natural History of California¹ tells us that chaparral is not only highly flammable, but is in fact dependent upon fire to sustain itself:

“Chaparral ... is ... most likely to burn. The community has evolved over millions of years in association with fires, and in fact **requires fire for proper health and vigor**. Thus it is not surprising that most chaparral plants exhibit adaptations enabling them to recover after a burn ... **Not only do chaparral plants feature adaptations that help them recover after a fire, but some characteristics of these plants, such as fibrous or ribbonlike shreds on the bark, seem to encourage fire**. Other species contain volatile oils. In the absence of fire, a mature chaparral stand may become senile, in which case growth and reproduction are reduced.” (emphasis added)

The local chapter (Yerba Buena) of the California Native Plant Society acknowledges the value of fire to restore and maintain native plant populations. A wildfire fire on San Bruno Mountain in native grassland and coastal scrub “consumed about 300 acres” in June 2008, according to an article on their website². The article reports that

“Fire is an adaptive management tool that, along with natural grazing and browsing, has been missing in promoting healthy grasslands that once covered much of the lower elevations of California ... The threats to native grasslands are invasions of non-native grasses and forbs, and succession by native and invasive shrubs. Fortunately the fire scrubbed the canyons pretty clean of just about everything. This gives the land a shot of nutrients to recharge the soil and awaken the seedbanks that have long been lying dormant.”

The fire on Angel Island in October 2008, demonstrates that native grassland is more flammable than the non-native forest. According to an “environmental scientist” from the California state park system, 80 acres of eucalyptus were removed from Angel Island 12 years ago in order to restore native grassland. Only 6 acres of eucalyptus remain.³ The fire that burned 400 acres of the 740 acres of Angel Island in 2008 stopped at the forest edge: “At the edge of the burn belt lie strips of intact tree groves ... a torched swath intercut with untouched forest.”⁴ It was the native grassland and brush that burned on Angel Island and the park rangers were ecstatic about the beneficial effects of the fire: “The shrubs-coyote bush, monkey flower and California sage-should green up with the first storms ... The grasses will grow up quickly and will look like a golf course.” Ironically, the “environmental scientist” continues to claim that the eucalyptus forest was highly flammable, though it played no part in this fire and there was no history of there ever having been a fire in the eucalyptus during the 100 years prior to their removal.

Unfortunately, the 1991 fire in the Oakland hills has enabled native plant advocates to maintain the fiction that eucalyptus is highly flammable. And in that case there is no doubt that they were involved in that devastating fire. However, there were factors in that fire that are not applicable to San Francisco. The climate in San Francisco is milder than the climate in the East Bay because of the moderating influence of the ocean. It is cooler in the summer and warmer in the winter. There are never prolonged, hard freezes in San Francisco that cause the eucalyptus to die back, creating dead, flammable leaf litter. The 1991 fire in the Oakland hills occurred in the fall, following a hard winter freeze that produced large amounts of flammable leaf litter. In fact, there were several wildfires in the Oakland hills in the 20th century. Each followed a hard winter causing vegetation to die back.

According to the FEMA Technical Report, the 1991 Oakland hills fire started in grass, spread to dry brush, and was then driven by the wind to burn everything in its path. The fire burned native plants and trees as readily as eucalyptus.⁵

When it is hot and dry in the Oakland hills, as it was at the time of the 1991 fire, it is cool and damp in San Francisco. Fogs from the ocean drift over the eucalyptus forests, condensing on the leaves of the trees, falling to the ground, moistening the leaf litter.⁶ When the heat from the land meets the cool ocean air, the result is the fog that blankets San Francisco during the summer. These are not the conditions for fire ignition that exist in the Oakland hills.

UCSF applied for a FEMA grant to fund its project to destroy the eucalyptus forest and restore native chaparral, based on its claim that the eucalyptus forest is highly flammable. In its letter of October 1, 2009 (obtained by FOIA request), FEMA raised questions about UCSF's claim of fire hazard. (See Attachment VII-A) FEMA asked UCSF to explain how fire hazard would be reduced by eliminating most of the existing forest, given that **reducing moisture on the forest floor by eliminating the tall trees that condense the fog from the air could increase the potential for ignition**. FEMA also asked UCSF to provide "scientific evidence" to support its response to this question. Rather than answer this and other questions, UCSF chose to withdraw its FEMA application.

The reputation of eucalyptus as a fire hazard is also based on the assumption that oils in its leaves are flammable. The National Park Service reports on its website that the leaves are, in fact, fire resistant: "The live foliage [of the eucalyptus] proved fire resistant, so a potentially catastrophic crown fire was avoided."⁷

The predominant species of eucalyptus in California, the blue gum eucalyptus (*E. globulus*) is native to Tasmania. Scientists at the University of Tasmania conducted laboratory experiments on the plants and trees in the Tasmanian forest to determine the relative flammability of their native species. The blue gum eucalyptus (*E. globulus*) is included in this study. The study reports that, "*E. globulus* leaves, both juvenile and adult, presented the greatest resistance [to ignition] of all the eucalypts studied. In this case, leaf thickness was important as well as the presence of a waxy cuticle." Also, in a table titled "Rate of flame front movement," the comment for *E. globulus* leaves is "resistant to combustion."⁸ In other words, **despite the oil content in the leaf, its physical properties protect the leaf from ignition**.

Even if oils were a factor in flammability, there are many native plants that are equally oily, such as the ubiquitous coyote brush and bays. According to Cornell University studies, essential/volatile oils in blue gum eucalyptus leaves range from less than 1.5 to over 3.5%.⁹ The leaves of native California bay laurel trees contain 7.5% of essential/volatile oils, **more than twice the amount of oil in leaves of blue gums**.¹⁰

These principles are best illustrated by a photograph of an actual fire in San Diego in 2003 in which all the homes burned to the ground, but the eucalyptus forest surrounding those homes did not ignite:

Likewise, non-native broom is not more flammable than its native counterpart in the chaparral plant community, coyote brush. The leaves of both shrubs are small, the fine fuel that ignites more readily than larger leaves and branches. But the leaves of native coyote brush contain oil not found in non-native broom. And the branches of broom are green to the ground, unlike the branches of coyote brush which become woody thickets with age. Broom therefore contains more moisture than coyote brush, which reduces its combustibility.

Fire is an essential feature of the landscape that is native to California.¹¹ Destroying a non-native forest in order to create a native landscape of grassland and scrub will not reduce fire hazard.

2. Thinning the non-native forest will NOT reduce fire hazard

The DEIR makes the following claim:

“... timber thinning would increase the space between trees, reducing the ability of a fire to rapidly spread.” (DEIR, page 396)

Most fires in California are hot, wind-driven fires in which everything burns. The composition of the fuel load in a wind-driven fire is irrelevant. Everything in its path will burn.¹² The 1991 fire in the Oakland hills was an example of such a fire. According to the FEMA technical report on that fire, both native and non-native vegetation, as well as about 3,800 homes burned in that fire.

Windbreaks are therefore one of the few defenses in a wind-driven fire. For that reason, in its letter of October 1, 2009 (see attachment Vii-A), FEMA asked UCSF to explain how the destruction of the tall trees on Mount Sutro would reduce fire hazard. FEMA noted that **eliminating the windbreak that the tall trees provide has the potential to enable a wind-driven fire to sweep through the forest unobstructed.** FEMA also asked UCSF to provide “scientific evidence” to support its answer to this question. We repeat, UCSF chose to withdraw its application for FEMA funding of its project rather than answer this question.

In 1987, 20,000 hectares burned in a wildfire in the Shasta-Trinity National Forest. The effects of that fire on the forest were studied by Weatherspoon and Skinner of the USDA Forest Service. They reported the results of their study in *Forest Science*.¹³ **They found the least amount of fire damage in those sections of the forest that had not been thinned or clear-cut.** In other words, the more trees there were, the less damage was done by the fire. They explained that finding:

“The occurrence of lower Fire Damage Classes in uncut stands [of trees] probably is attributable largely to the absence of activity fuels [e.g., grasses] and to the relatively closed canopy, which reduces insolation [exposure to the sun], wind movement near the surface, and associated drying of fuels. Conversely, **opening the stand by partial cutting adds fuels and creates a microclimate conducive to increased fire intensities.**” (emphasis added)

In other words the denser the forest,

> The less wind on the forest floor, thereby slowing the spread of fire

- > The more shade on the forest floor.
 - The less flammable vegetation on the forest floor
 - The more moist the forest floor

All of these factors combine to reduce fire hazard in dense forest. Likewise, in a study of fire behavior in eucalyptus forest in Australia, based on a series of experimental controlled burns, wind speed and fire spread were significantly reduced on the forest floor.¹⁴

Furthermore, a recently published study corroborates that thinning the forest does not significantly reduce fire risk, nor does it increase carbon storage in the forest¹⁵

“It has been suggested that thinning trees and other fuel-reduction practices aimed at reducing the probability of high-severity forest fire are consistent with efforts to keep carbon (C) sequestered in terrestrial pools, and that such practices should therefore be rewarded rather than penalized in (- accounting schemes. By evaluating how fuel treatments, wildfire, and their interactions affect forest C stocks across a wide range of spatial and temporal scales, we conclude that this is extremely unlikely. **Our review reveals high C losses associated with fuel treatment, only modest differences in the combustive losses associated with high-severity fire and the low-severity fire that fuel treatment is meant to encourage, and a low likelihood that treated forests will be exposed to fire.** Although fuel- reduction treatments may be necessary to restore historical functionality to fire-suppressed ecosystems, we found little credible evidence that such efforts have the added benefit of increasing terrestrial C stocks.” (emphasis added)

Thinning the forest will not reduce fire hazard. In fact, it will increase fire hazard.

The DEIR also says that fire hazard will be reduced by removing dead trees:

“Removed trees would include those that are diseased and dying, thereby reducing easily combustible fuel loads.” (DEIR, page 396)

We do not dispute that dead trees are more flammable than living trees because they contain less moisture, one of the key variables in combustibility. However, we have established in another comment (Part I) that the claim that only dead and dying trees will be removed is contradicted by the SNRAMP which the DEIR is supposedly evaluating. There is no evidence that the trees that will be removed are dead or dying. Furthermore, if the predictions of experts on Sudden Oak Death prove to be true, 90% of the native oak woodland which SNRAMP proposes to expand will be dead and highly flammable within 25 years.¹⁶

Conclusion

Unless scientific evidence can be provided to support statements in the DEIR regarding fire hazard, the final EIR must be corrected to reflect the scientific and experiential evidence that refutes it:

- > **Native vegetation is not inherently less flammable than non-native vegetation, including eucalyptus**
- > **Thinning the forest will not reduce fire hazards.** [SFFA-3-25]
- The claim that the existing flora presents a fire hazard has been reasonably cast into doubt as the natural ecology is that of a cloud forest with high moisture. [Burgard-1-02]
- (4) My understanding is cutting the trees down would increase fire danger as there would no longer be enough trees to create their own moist atmosphere. [Hess-1-04]
- The most important statement I can make to you is that there is absolutely no evidence to support the idea that native plants are, by their nature, more resistant to fire than non-natives. It is the characteristics of a plant or tree that make it more or less flammable. For example, it is true that oily leaves make the non-native blue-gum eucalyptus flammable if fire reaches the crown of the tree. Yet, according to the USDA, blue gum leaves are classed as “intermediate in their resistance to combustion, and juvenile leaves are highly resistant to flaming.” <http://vwww.fas.fed.us/database/feis/plants/tree/eucglo/all.html>.

If a tree is well-maintained, with understory removed and branches cut that grow less than 6-8 feet from the ground, there is very little risk of fire reaching the crown of a tall tree.

Moreover, the trunk of a eucalyptus tree, especially the trunks of older eucs, are not easy to burn; the trunks of oaks (of the same diameter) burn much more quickly. In fact, many blue gum eucalyptus trees in the North Hills survived the 1991 fire. I know this from my own observation and experience. The fire stopped, up the street from my house on Alvarado Road, at three giant eucalyptus trees that the flames did not even singe. The fire did burn to the ground all of the vegetation, including several coast live oaks, across the street from my house.

What about those oily leaves? The oils in leaves of blue gum eucalyptus trees range from less than 1.5 to over 3.5%. <http://www.ansci.cornell.edu/plants/medicinal/eucalyp.html>/ Our research has shown that the leaves of native bay trees contain more oil (7.5%) than the leaves of a blue gum eucalyptus. That is twice the amount of oil in leaves of blue gum eucalyptus! <http://www.paleotechnics.com/Articles/Bayarticle.html>.

Bay trees in their scrub form, often growing as understory to oak trees, are highly flammable because the oily leaves (and oily branches) grow close to the ground, which is often covered in tall grass that dries out at the height of the fire season.

On page 396 the EIR notes the “high fire hazard rating of aging French broom and eucalyptus.” It is amazing to me that the EIR considers French broom and eucalyptus to be similar in fire hazard risk since they are totally different species with completely different characteristics. French broom, like native coyote bush, is highly flammable; in fact, coyote

bush, like most native chaparral species, especially manzanitas, chamise, buck brush scrub oaks, and mountain mahogany, are more flammable than French broom because they contain more dead wood than French broom, and their leaves are small and oily. According to Napafirewise.org, chaparral species grow in dense stands that “create impenetrable fields that burn with intense heat and are very difficult to suppress or control, chaparral species are the hardest to manage and to keep fire safe.”

According to the Hills Emergency Forum, all brush communities, which include chaparral, can reach flames in excess of 69 feet. Grassland fires (made up of native and/or non-native grasses) can reach flame lengths of 12-38 feet. There is no scientific evidence (only wishful thinking) to support the idea that native grasses are more resistant to fire than non-native grass. The way to prevent ignition through a carelessly thrown cigarette or a spark from a catalytic converter is to keep the grass short (and watered if possible, especially in the fire season).

What about flame lengths in a eucalyptus grove? The EIR does not mention that flame lengths in a eucalyptus grove range from 6-21 feet, depending on the depth of litter under the trees. Eucs are in fact the only tree species where the depth of the litter under the tree is considered in estimating flame length even though several other tree species produce litter that is drier (more conducive to ignition) than the moist litter under eucalyptus trees. If the euc litter is regularly picked up, flame lengths are even lower.

It is astounding to me that that the EIR constantly employs the use of the words “highly flammable” with “eucalyptus trees,” as if repeating that epithet will convince readers of its truth. As I have written above, eucalyptus trees have been scapegoated and vilified to suit the agenda of nativists. There is no reason to believe that native trees are resistant to fire. In prehistoric times, the Native Americans set fire to meadows of native grass and hills of native chaparral with scrub oaks and bays. In those days before non-native trees had been introduced, Native Americans had no trouble setting these fires on a regular basis for hunting and harvesting purposes.

There is no scientific evidence for the claim that native plants and trees are less flammable than non-natives. The characteristics of some plants and trees make them easier to ignite and quicker than burn than others, but whether they are native or non-native has nothing to do with how flammable they are. Fire does not discriminate between native and non-native vegetation. It is the advocates of native plant restoration who discriminate because they are determined to advance their own irrational agenda. [Hovland-1-02]

- Non-native vegetation, including eucalyptus is NOT inherently more flammable than native vegetation. The DEIR makes the following claims:
 - > “... maximize indigenous vegetation for fire control.” (DEIR, page 78)
 - > “... vegetation with high fire hazard ratings such as broom and eucalyptus.” (DEIR, page 111,396)
 - > “... replacing highly flammable eucalyptus trees with more fire resistant species.” (DEIR, page 410)

Fear of fire has fueled the heated debate about native plant restorations in the Bay Area. Native plant advocates want the public to believe that the non-native forest is highly flammable, that its destruction and replacement with native landscapes would make us safer. Nothing could be further from the truth. The fact is that the forest – whether it is native or non-native – is generally less flammable than the landscape that is native to California. In the specific case of the Suto Forest in San Francisco, this general principal is particularly true: the existing forest is significantly less flammable than the landscape that is native to that location.

The “Mount Suto Management Plan” was written by UCSF and is available on their website. It describes “native” Mount Suto as follows: “In the 1800s, like most of San Francisco’s hills, Mount Parnassus [now known as Mount Suto] was covered predominantly with coastal scrub chapparal [sic], consisting of native grasses, wildflowers, and shrubs ...” (page 4) (emphasis added)

A Natural History of California¹ tells us that chaparral is not only highly flammable, but is in fact dependent upon fire to sustain itself:

“Chaparral ... is ... most likely to burn. The community has evolved over millions of years in association with fires, and in fact **requires fire for proper health and vigor**. Thus it is not surprising that most chaparral plants exhibit adaptations enabling them to recover after a burn ... **Not only do chaparral plants feature adaptations that help them recover after a fire, but some characteristics of these plants, such as fibrous or ribbonlike shreds on the bark, seem to encourage fire**. Other species contain volatile oils. In the absence of fire, a mature chaparral stand may become senile, in which case growth and reproduction are reduced.” (emphasis added)

The local chapter (Yerba Buena) of the California Native Plant Society acknowledges the value of fire to restore and maintain native plant populations. A wildfire fire on San Bruno Mountain in native grassland and coastal scrub “consumed about 300 acres” in June 2008, according to an article on their website. The article reports that

“Fire is an adaptive management tool that, along with natural grazing and browsing, has been missing in promoting healthy grasslands that once covered much of the lower elevations of California ... The threats to native grasslands are invasions of non-native grasses and forbs, and succession by native and invasive shrubs. Fortunately the fire scrubbed the canyons pretty clean of just about everything. This gives the land a shot of nutrients to recharge the soil and awaken the seedbanks that have long been lying dormant.”

The fire on Angel Island in October 2008, demonstrates that native grassland is more flammable than the non-native forest. According to an “environmental scientist” from the California state park system, 80 acres of eucalyptus were removed from Angel Island 12 years ago in order to restore native grassland. Only 6 acres of eucalyptus remain. The fire that burned 400 acres of the 740 acres of Angel Island in 2008 stopped at the forest edge: “At the edge of the burn belt lie strips of intact tree groves ... a torched swath intercut with untouched forest.” It was the native grassland and brush that burned on Angel Island and

the park rangers were ecstatic about the beneficial effects of the fire: “The shrubs – coyote bush, monkey flower and California sage – should green up with the first storms ... The grasses will grow up quickly and will look like a golf course.” Ironically, the “environmental scientist” continues to claim that the eucalyptus forest was highly flammable, though it played no part in this fire and there was no history of there ever having been a fire in the eucalyptus during the 100 years prior to their removal.

Unfortunately, the 1991 fire in the Oakland hills has enabled native plant advocates to maintain the fiction that eucalyptus is highly flammable. And in that case there is no doubt that they were involved in that devastating fire. However, there were factors in that fire that are not applicable to San Francisco. The climate in San Francisco is milder than the climate in the East Bay because of the moderating influence of the ocean. It is cooler in the summer and warmer in the winter. There are never prolonged, hard freezes in San Francisco that cause the eucalyptus to die back, creating dead, flammable leaf litter. The 1991 fire in the Oakland hills occurred in the fall, following a hard winter freeze that produced large amounts of flammable leaf litter. In fact, there were several fires in the Oakland hills in the 20th century. Each followed a hard winter causing vegetation to die back.

The 1991 Oakland hills fire started in grass, spread to dry brush, and was then driven by the wind to burn everything in its path. The fire burned native plants and trees as readily as eucalyptus.

When it is hot and dry in the Oakland hills, as it was at the time of the 1991 fire, it is cool and damp in San Francisco. Fogs from the ocean drift over the eucalyptus forests, condensing on the leaves of the trees, falling to the ground, moistening the leaf litter. When the heat from the land meets the cool ocean air, the result is the fog that blankets San Francisco during the summer. These are not the conditions for fire ignition that exist in the Oakland hills.

UCSF applied for a FEMA grant to fund its project to destroy the eucalyptus forest and restore native chaparral, based on its claim that the eucalyptus forest is highly flammable. In its letter of October 1, 2009 (obtained by FOIA request), FEMA raised questions about UCSF’s claim of fire hazard. (See Attachment A) FEMA asked UCSF to explain how fire hazard would be reduced by eliminating most of the existing forest, **given that reducing moisture on the forest floor by eliminating the tall trees that condense the fog from the air could increase the potential for ignition.** FEMA also asked UCSF to provide “scientific evidence” to support its response to this question. Rather than answer this and other questions, UCSF chose to withdraw its FEMA application.

The reputation of eucalyptus as a fire hazard is also based on the assumption that oils in its leaves are flammable. The National Park Service reports on its website that the leaves are, in fact, fire resistant: “The live foliage [of the eucalyptus] proved fire resistant, so a potentially catastrophic crown fire was avoided.”

The predominant species of eucalyptus in California, the blue gum eucalyptus (*E. globulus*) is native to Tasmania. Scientists at the University of Tasmania conducted laboratory experiments on the plants and trees in the Tasmanian forest to determine the relative flammability of their native species. The blue gum eucalyptus (*E. globulus*) is included in

this study. The study reports that, “E. globulus leaves, both juvenile and adult, presented the greatest resistance [to ignition] of all the eucalypts studied. In this case, leaf thickness was important as well as the presence of a waxy cuticle.” Also, in a table titled “Rate of flame front movement,” the comment for E. globulus leaves is “resistant to combustion.” In other words, **despite the oil content in the leaf, its physical properties protect the leaf from ignition.**

Even if oils were a factor in flammability, there are many native plants that are equally oily, such as the ubiquitous coyote brush and bays. According to Cornell University studies, essential/volatile oils in blue gum eucalyptus leaves range from less than 1.5 to over 3.5%. The leaves of native California bay laurel trees contain 7.5% of essential/volatile oils, **more than twice the amount of oil in leaves of blue gums.**”

Likewise, non-native broom is not more flammable than its native counterpart in the chaparral plant community, coyote brush. The leaves of both shrubs are small, the fine fuel that ignites more readily than larger leaves and branches. But the leaves of native coyote brush contain oil not found in non-native broom. And the branches of broom are green to the ground, unlike the branches of coyote brush which become woody thickets with age. Broom therefore contains more moisture than coyote brush, which reduces its combustibility.

Fire is an essential feature of the landscape that is native to California. Destroying a non-native forest in order to create a native landscape of grassland and scrub will not make us safer. [McAllister-2-01]

■ **2. Thinning the non-native forest will NOT reduce fire hazard.**

The DEIR makes the following claim:

“... timber thinning would increase the space between trees, reducing the ability of a fire to rapidly spread.” (DEIR, page 396)

Most fires in California are hot, wind-driven fires in which everything burns. The composition of the fuel load in a wind-driven fire is irrelevant. Everything in its path will burn. The 1991 fire in the Oakland hills was an example of such a fire. According to the FEMA technical report on that fire, both native and non-native vegetation, as well as about 3,800 homes burned in that fire.

Windbreaks are therefore one of the few defenses in a wind-driven fire. For that reason, in its letter of October 1, 2009 (see attachment A), FEMA asked UCSF to explain how the destruction of the tall trees on Mount Sutro would reduce fire hazard. FEMA noted that **eliminating the windbreak that the tall trees provide has the potential to enable a wind-driven fire to sweep through the forest unobstructed.** FEMA also asked UCSF to provide “scientific evidence” to support its answer to this question. We repeat, UCSF chose to withdraw its application for FEMA funding of its project rather than answer this question.

In 1987, 20,000 hectares burned in a wildfire in the Shasta-Trinity National Forest. The effects of that fire on the forest were studied by Weatherspoon and Skinner of the USDA Forest Service. They reported the results of their study in Forest Science. **They found the least amount of fire damage in those sections of the forest that had not been thinned or clear-**

cut. In other words, the more trees there were, the less damage was done by the fire. They explained that finding:

“The occurrence of lower Fire Damage Classes in uncut stands [of trees] probably is attributable largely to the absence of activity fuels [e.g., grasses] and to the relatively closed canopy, which reduces insolation [exposure to the sun], wind movement near the surface, and associated drying of fuels. Conversely, opening the stand by partial cutting adds fuels and creates a microclimate conducive to increased fire intensities.”

In other words the denser the forest,

- > The less wind on the forest floor, thereby slowing the spread of fire
- > The more shade on the forest floor.
 - o The less flammable vegetation on the forest floor
 - o The more moist the forest floor

All of these factors combine to reduce fire hazard in dense forest. Likewise, in a study of fire behavior in eucalyptus forest in Australia, based on a series of experimental controlled burns, wind speed and fire spread were significantly reduced on the forest floor. **Thinning the forest will not reduce fire hazard. In fact, it will increase fire hazard.**

The DEIR also says that fire hazard will be reduced by removing dead trees:

“Removed trees would include those that are diseased and dying, thereby reducing easily combustible fuel loads.” (DEIR, page 396)

We do not dispute that dead trees are more flammable than living trees because they contain less moisture, one of the key variables in combustibility. However, we have established in another comment that the claim that only dead and dying trees will be removed is contradicted by the SNRAMP which the DEIR is supposedly evaluating. There is no evidence that the trees that will be removed are dead or dying (see Attachment B). Furthermore, if the predictions of experts on Sudden Oak Death prove to be true, 90% of the native oak woodland which SNRAMP proposes to expand will be dead and highly flammable within 25 years. [McAllister-2-02]

Response HZ-4

These comments suggest that native vegetation is not inherently less flammable than nonnative vegetation (such as eucalyptus) and further states that thinning the nonnative forest will not reduce fire hazards. Comment SFFA-3 also included a series of attachments, including various correspondence, a Material Safety Data Sheet, and herbicide application data within SFRPD parks from 2008 to 2011.

As discussed in Draft EIR Section V.I.2, Environmental Setting, the Natural Areas have an assigned fire hazard rating (as rated by the California Department of Forestry and Fire Protection) that ranges from moderate to very high/severe classifications. As stated in Draft EIR Chapter III, Project Description, the objectives of the SNRAMP include installing fire breaks, where appropriate, and

discouraging the establishment of vegetation with high fire hazard ratings, all to reduce the likelihood of fires and to prevent the spread of fires.

Many factors contribute to the flammability of a species or habitat. According to the *2010 Strategic Fire Plan for California*,¹⁶² some of the factors include the type of vegetation, the moisture content of the vegetation, and weather conditions (e.g., high wind or hot, dry conditions). In the case of trees, flammability is affected by various characteristics of the tree and stand (such as the amount of leaf litter and the presence or absence of lower branches) and ranges from moderate to high. For instance, at very high temperatures, eucalyptus species release a flammable gas that mixes with air to send fireballs exploding out in front of the fire,¹⁶³ while large oak trees, which are one of the species proposed in the Natural Areas, have a thick, fireproof bark.¹⁶⁴

In terms of the flammability of eucalyptus trees, the California Invasive Plant Council states that:

“The fuel complex formed by this debris is extremely flammable, and under severe weather conditions could produce drifting burning material with the potential to ignite numerous spot fires. Because stringy bark is carried away while burning, eucalyptus forests are considered the worst in the world for spreading spot fires. The Oakland hills firestorm was both intense and difficult to control because of the many stands of eucalyptus.”¹⁶⁵

Draft EIR Table 5 (provided on p. 114) indicates that of the 117,433 invasive trees located within the Natural Areas (including Sharp Park), 18,448 trees (or 16 percent) would be removed and 98,985 trees (or 84 percent) would remain. Of the 18,448 trees that would be removed, 15,000 trees would be removed in Sharp Park and 3,448 trees would be removed in the San Francisco Natural Areas; therefore, under the SNRAMP, nonnative trees and brush would not be removed in the majority of open spaces in the city. Also, restoration would be accomplished in both unforested areas, as well as areas where nonnative, invasive species have been removed. As stated on SNRAMP p. 1-3, one of the objectives of the Plan is to promote the functioning of San Francisco’s native ecosystem, including the maintenance of native biodiversity, which requires the removal of invasive species. The amount of trees that would be removed and native species that would be replaced pursuant to the SNRAMP will not contribute a significant amount of a flammable fuel source. In fact, in high

¹⁶² Board of Forestry and Fire Protection, *2010 Strategic Fire Plan for California*, January 27, 2010. This document is available online at: <http://cdfdata.fire.ca.gov/pub/fireplan/fpupload/fpppdf668.pdf>, accessed on June 7, 2016.

¹⁶³ Liza Gross, KQED Science Contributor, *Eucalyptus: California Icon, Fire Hazard and Invasive Species*, June 12, 2013. This document is available online at: <http://ww2.kqed.org/science/2013/06/12/eucalyptus-california-icon-fire-hazard-and-invasive-species/epicormic-bud-crop/>, accessed on June 7, 2016.

¹⁶⁴ Allan A. Schoenherr, *A Natural History of California*, London, England: University of California Press, 1992. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA, 94103, as part of Case File No. 2012.1427E 400 with three-days advance notice.

¹⁶⁵ <http://www.cal-ipc.org/ip/management/ipcw/pages/detailreport.cfm?usernumber=48&surveynumber=182.php>, accessed on August 7, 2014.

hazard risk areas, particularly where the natural areas abut developed areas (e.g., residential uses), species with lower fire hazard ratings would be used for revegetation, and revegetation efforts will also include planting species at appropriate set-backs from buildings and structures so as not to increase the potential spread of fire, if a fire does occur. Additionally, due to the relatively low percentage of tree removals, existing windbreak effects, which help reduce the spread of fires, would not be significantly reduced (see Response WS-1 and Response WS-2, RTC pp. 4-309 and 4-310).

Given the existing fire hazard ratings and the objectives of the SNRAMP to reduce fire potential through active means such as setbacks, fire breaks, etc., fire hazard would be reduced when compared to existing conditions, particularly with the removal of dead or dying trees. Thus, an impact conclusion of less than significant, as described for Impact HZ-16, Impact HZ-17, and Impact HZ-18, is appropriate.

The text on Draft EIR pp. 396, 397, and 410 has been changed, as follows.

- On Draft EIR p. 396 (line 28):

Also, implementing recommendation GR-13a would reduce the presence of vegetation with high fire hazard ratings, ~~such as dense and aging French broom and eucalyptus, adjacent to homes and other structures.~~ Recommendation GR-13a further states that, when possible, minimum fire reduction zones of 30 feet should be maintained. Also, no brush piles shall be created within fire reduction zones. Trees determined to be hazardous to adjacent homes by the SFRPD Arborist should be removed. Tree and invasive weed removal ~~would~~could reduce the amount of available fuel for fires. More important, timber thinning would increase the space between trees, reducing the ability of a fire to rapidly spread in some instances.

- On Draft EIR p. 397 (beginning with line 7):

As Sharp Park and a few Natural Areas within San Francisco are classified as moderate to high fire hazard zones, tree and invasive weed removal as part of the programmatic projects would reduce the available fuel loads and could reduce the potential of fire hazards within these areas.

- Also on Draft EIR p. 397 (lines 18 to 21):

Similar to the impacts described under the programmatic projects, routine maintenance activities that remove fuel loads ~~would~~could reduce the presence of vegetation with high fire hazard ratings, ~~such as dense and aging French broom and eucalyptus.~~ Therefore, tree and invasive weed removal ~~would~~could reduce the amount of available fuel for fires.

- On Draft EIR p. 410 (beginning with line 15):

Among the objectives of the recommended actions at Mount Sutro are replacing ~~highly flammable~~ eucalyptus trees with more fire resistant species, increasing age diversity of trees, and improving the health and safety of the remaining trees.

The comments mentioned the “Mount Sutro Management Plan,” which was written by UCSF and made available in 2001. Since publication of the SNRAMP Draft EIR, UCSF also published a Draft

EIR for the UCSF Mount Sutro Management project,¹⁶⁶ which proposed a number of management activities and demonstration projects in the UCSF Mount Sutro Open Space Reserve that were aimed towards the removal of nonnative trees and plants and the conversion to native species, consistent with the general goals of the 2001 Management Plan. However, in the fall of 2013, UCSF decided to revise the 2001 Mount Sutro Management Plan and formed a Technical Advisory Committee (TAC) to provide expert guidance on best practices in forest management and retained independent forest management consultants to develop a draft management plan for the Reserve that will be reviewed by the TAC and then vetted by the community. Once the TAC has completed its review, UCSF will present the plan to the community for feedback. After a final proposed plan is in place, UCSF will begin the environmental review process with the goal of publishing a draft EIR in late 2016 or early 2017. Therefore, there is currently no project related to the Mount Sutro Open Space Reserve that is currently under consideration by UCSF.

Comment HZ-5 Disagree that all project alternatives will have less than significant effects from pesticide use

The response to Comment HZ-5 addresses all or part of the following individual comment:

Borden-1-07

- I question the EIR's statement the impact of herbicide use will be less than significant for all project alternatives. If people and animals pass through areas that have recently been sprayed with herbicides, is it safe? Natural Areas already does a lot of herbicide application. I frequently pass through such areas. [Borden-1-07]

Response HZ-5

This comment expresses general disagreement with the Draft EIR's conclusion that impacts related to herbicide use under all project alternatives are less than significant but provides no evidence that such impacts would be significant.

As described in Response HZ-1, RTC p. 4-531, and in Draft EIR Section V.I.2, Environmental Setting, Impact HZ-7, Impact HZ-9, and Impact HZ-11, the NAP employs several measures to ensure that pesticide application would not endanger public health and safety, and overall, the Natural Areas use the lowest amount of pesticides (at 4 percent) as compared to other divisions within SFRPD, despite accounting for over 40 percent of the parkland under SFRPD control. As further described in Response HZ-1, RTC p. 4-531, the SFRPD uses the IPM approach, which integrates all pest control operations; establishes regular monitoring, accountability requirements, and phasing out use of the most hazardous pesticides. SFRPD participates in the Department of Environment's IPM Technical Advisory Committee, which is populated by staff who are committed to reducing pesticide use. The NAP uses herbicides in its parks as a last resort to combat invasive weeds, the single biggest threat

¹⁶⁶ University of California San Francisco, *Mount Sutro Management Project Draft EIR*, January 18, 2013.

to San Francisco's natural heritage. Response HZ-1, RTC p. 4-531, provides a detailed discussion of the SFRPD's pesticide use in the Natural Areas, as well as additional information regarding the Draft EIR's conclusion that impacts resulting from pesticide use would be less than significant. With respect to the alternatives analysis, the amount of pesticide use under the No Project Alternative would not change from existing baseline conditions, and was, therefore, determined to be less than significant. The Maximum Recreation Alternative and Maintenance Alternative would include less invasive tree and vegetation removal. As such, the potential need for chemical control of invasive tree and vegetation would similarly decrease when compared to the proposed project. Only the Maximum Restoration Alternative would include more invasive tree and vegetation removal than the proposed project. As described on Draft EIR p. 490, under this Alternative, impacts of hazardous materials would be similar to the proposed project and the SFRPD would implement similar management practices for pesticide use that would reduce the potential to impact nearby human populations, wildlife and groundwater (including continued implementation of the City's IPM ordinance, which prioritizes using mechanical or biological controls before using select chemical controls approved by the Department of the Environment).

This comment presents no evidence that the proposed project would result in a significant impact. In the absence of substantial evidence that the proposed project would result in a significant impact, the Draft EIR properly concludes that the impacts of herbicide use, under all project alternatives would be less than significant. The Final EIR will be considered by the decision makers as part of their decision to approve, modify, or disapprove the proposed project.

4.E ALTERNATIVES [AL]

The comments and corresponding responses in this section cover topics in Draft EIR Chapter VII.

4.E.1 No Project Alternative

Comment AL-1	Support the No Project Alternative
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The response to Comment AL-1 addresses all or part of the following individual comment:

Ray-1-01

- I support the No Project Alternative. NAP jurisdiction should not be expanded beyond the areas of their detrimental activities. Most plants require at least one or two summer waterings to establish. The NAP policy to not water any of the plants they install is instrumental in the monumental failure of many of their planted areas. [Ray-1-01]

Response AL-1

This comment expresses support for the No Project Alternative analyzed in the EIR. This comment does not raise any specific environmental issues about the adequacy or accuracy of the Draft EIR's coverage of environmental impacts that require a response in this RTC document under CEQA Guidelines Section 15088. Comments in support of an EIR alternative over the proposed project will be considered by the decision makers as part of their decision to approve, modify, or disapprove the proposed project. This consideration is carried out independent of the environmental review process.

Comments regarding the NAP maintenance activities are directed to Response G-6, RTC p. 4-34. Further, in terms of watering, plants are typically watered during their establishment period, through one or two dry seasons, to help the plants develop sufficient root structures to thrive.

4.E.2 Maximum Restoration Alternative

Comment AL-2	Inadequate description of Maximum Restoration Alternative
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The response to Comment AL-2 addresses all or part of the following individual comments:

NTC-1-01	SFT-1-04	Gerrie-1-04
Langille-1-08	Pfister-1-06	Wilson-1-05
PH-Brastow-03		

- The Natural Areas Plan goals are excellent. The DEIR describes accurately the environments of the 32 natural areas, and with notable exceptions, does an excellent job analyzing the environmental impacts of the Natural Areas Plan. However, we are concerned that the analysis neglects to fully address the long-term impact of invasive plants from the retention of invasive weed-nurturing eucalyptus groves in the MA-3 areas. The true impacts (and benefits!) of the maximum restoration alternative – one which presumably would restore significant portions of the MA-3 areas – cannot be properly evaluated against the proposed project, since the description is only two pages long. Thus, no such definitive conclusions about relative impacts from invasive plants, i.e., the degree to which they remain a threat to biodiversity, as a function of that alternative versus the Proposed Plan, can be made by the public because there is no substance to the alternative. It is completely general. [NTC-1-01]
- ➤ The maximum restoration alternative is inadequately described, and so cannot be properly evaluated as a potential environmentally superior alternative. [SFT-1-04]
- The true impacts of the maximum restoration alternative cannot be adequately evaluated since it is only two pages long therefor no definitive conclusions about the impacts of recreation nor of biological benefits since there is no depth to the alternative. [Gerrie-1-04]
- The true impacts (and benefits!) of the maximum restoration alternative cannot be properly evaluated against the proposed project, since the description is only two pages long. Thus, no such definitive conclusions about recreation impacts or biological benefits can be made

because there is no substance to the alternative. It is totally general. [Langille-1-08] [Pfister-1-06] [Wilson-1-05]

- And a couple more things, so I'm afraid that the true impacts of the maximum restoration alternative are really hard to evaluate because the description of that is literally only two pages long, and then it goes into the impacts, which is a few pages, but within describing the impacts, there's no specifics.

There's nothing about how the maximum restoration alternative varies from the project plan – from the project at the remainder – at all of the sites, and so I find it really hard for the public to say, well, this is what the maximum restoration alternative is going to do or this is what the maximum recreation alternative is going to do at any given site.

And finally, we would like to have a lot more specifics, as I said, included in those other alternatives, including at Sharp Park. [PH-Brastow-03]

Response AL-2

These comments state that the Draft EIR's description of alternatives is insufficient and does not provide a meaningful analysis of project alternatives. There are also specific questions about the relative impacts from invasive plants.

The significant effects of the maximum restoration alternative are provided in Draft EIR Section VII.B, Maximum Restoration Alternative, pp. 480 to 493, a total of 13 pages. Also, the commenters have not provided any supporting evidence to indicate how or in what manner the Maximum Restoration Alternative was inadequately described.

The alternatives described and evaluated in Draft EIR Chapter VII, Alternatives, are alternatives to the SNRAMP that were developed based on comments and recommendations received during the EIR scoping period and with the goal of reducing or eliminating impacts as compared to the proposed project. CEQA requires that an EIR consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation and that the analysis evaluate the comparative environmental impacts and merits of the alternatives (CEQA Guidelines Section 15126.6(a)).

In accordance with CEQA Guidelines Section 15126.6(d) and (f), the alternatives in the Draft EIR focus on the major characteristics of the proposed SNRAMP to support a comparison of the features and environmental impacts of that alternative to the proposed project. The alternatives were also developed to meet many of the project objectives, in accordance with CEQA Guidelines 15126.6(c), which balance habitat restoration and enhancement of native biodiversity with recreation. The major theme of each alternative provides a different balance to these project objectives. For example, the Maximum Recreation Alternative prioritizes public access and trails over habitat restoration.

As presented in Table 20, SNRAMP Alternatives Comparison, Draft EIR pp. 462 to 464, the major characteristics of the alternatives include differing levels of action with respect to: habitat

restoration, invasive tree and vegetation removal, public access and trail modifications, DPA reduction, and the Sharp Park Restoration Project. Table 20 of the Draft EIR describes the similarities and differences of the four alternatives as compared with the proposed project, providing sufficient information about each alternative that enabled a meaningful analysis and comparison with the proposed project in the Draft EIR.

One of the commenters also questions the impacts that would occur from the retention of invasive plants, including eucalyptus groves in the MA-3 areas. Invasive plants are not proposed to be removed in MA-3 areas under the proposed project (or the No Project Alternative), and, they are not being removed in MA-3 areas now; therefore, the project (and the No Project Alternative) would have no effects related to invasive plant removal in MA-3 areas compared to existing conditions.

Refer also to Response BI-15, RTC p. 4-402, for an additional discussion of the impacts of retaining invasive or nonnative species.

Comment AL-3	Maximum Restoration Alternative should restore all of Sharp Park Golf Course
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The response to Comment AL-3 addresses all or part of the following individual comments:

Sierra Club-1-01
PH-Brastow-04

Langille-1-01

Murphy-D-1-02

- Our main objection to the DEIR, as it is currently structured, is its treatment of restoration proposals for Laguna Salada in Sharp Park. We are submitting (under separate cover) as part of our comments the report, *Conceptual Ecosystem Restoration Plan and Feasibility Assessment Laguna Salada, Pacifica, California*, Prepared by: ESA PWA with Peter Baye, Ph.D. and Dawn Reis Ecological Studies, which contains a substantive critique of the Sharp Park Laguna Salada project as presented in the SNRAMP. We believe the DEIR analysis and alternatives presented for the Laguna Salada project are flawed and inadequate.

A major flaw of the Report's project-level analysis for the proposed Laguna Salada restoration is the insufficient scope of the project, which renders the project incapable of achieving its stated objectives, particularly with regard to provision of adequate habitat for the San Francisco Garter Snake (SFGS). In scoping comments and in the *ad hoc* alternative analysis performed by consultants earlier, the Sierra Club and other environmental organizations have consistently argued that a full range of alternatives, including a maximum restoration alternative (no golf), needs to be considered to give decision-makers the information necessary to determine which alternative best meets the project's objectives. By restricting the scope of the project exclusively to options which include an 18-link golf course, the analysis greatly compromises the project's ability to meet its goals. Indeed, the Report tacitly admits as much, as the proposed maximum restoration alternative goes beyond the original plan by including more acreage for upland habitat, in addition to re-constructed golf links. [Sierra Club-1-01]

- I am writing to advocate that the maximum restoration alternative must include restoring the whole Sharp Park golf course to endangered species, bird and other wildlife habitat for a truly ecologically sustainable coastal lagoon restoration.

Therefore, please separate out Sharp Park from the Natural Areas Plan! In addition, please ensure that the City and County of San Francisco places the protection of the natural environment and endangered species at Sharp Park Golf Course at the highest priority. [Langille-1-01]

- We encourage the removal of Sharps Park Golf Course from the plan. The golf course should be considered in much more detail. In fact, the failure to include the option to remove the entire golf course and restore it to nature should have been included, even if it were not the preferred alternative. The failure to do so suggests a failure in the CEQA process. [Murphy-D-1-02]
- I think given that the proposed project includes the 18-hole golf alternative from the alternatives report, the maximum restoration alternative should include restoring all of Sharp Park golf course. Thank you. [PH-Brastow-04]

Response AL-3

These comments request that the Draft EIR include an alternative that restores all of Sharp Park to provide habitat for the San Francisco garter snake and California red-legged frog, including the entire golf course, or at least those portions west of Highway 1.

The Draft EIR considered an alternative to the proposed project that would include restoration of all of Sharp Park, in Draft EIR Section VII.F, Alternatives Considered but Rejected, pp. 526 to 527. In accordance with CEQA Guidelines Section 15126.6, "... alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the proposed project and could avoid or substantially lessen one or more of the significant effects" and "alternatives shall be limited to ones that would avoid or substantially lessen the significant effects of the project."

While an alternative that would restore all of Sharp Park to provide a greater amount of habitat for the San Francisco garter snake and California red-legged frog could result in more beneficial long-term effects for these species, such an alternative would require removal of the Sharp Park Golf Course, which is both a recreational and historic resource. As such, this alternative would exacerbate significant environmental impacts identified in the Draft EIR instead of avoiding or substantially lessening them. Therefore, an alternative that would restore all of Sharp Park need not be analyzed under CEQA and was rejected from further consideration.

Comment AL-4 Support the Maximum Restoration Alternative
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The response to Comment AL-4 addresses all or part of the following individual comments:

Adam-1-01

Gaar-1-03

Gaar-1-04

Holzman-1-07

- I am strongly in favor of the implementation of the Maximum Restoration Alternative proposed in the Significant Natural Resource Areas Management Plan. [Adam-1-01]
- What is Recreation? The Maximum Recreation Alternative fails to discuss sustainable, nature enhancing recreation. If the priorities of the Maximum Recreation Alternative are defined as dog walking, bicycling or hiking-jogging then other forms of “green recreation” such as bird watching, botanizing, insect watching and habitat restoration are denied or reduced. With support for the Maximum Restoration Alternative more people will engage in nature loving recreation. Habitat restoration is the perfect form of recreation because volunteers sweat-off excess body weight, socialize with friends, neighbors and city gardeners and improve the biological health of our natural areas. [Gaar-1-03]
- Since I have twenty years of habitat restoration experience in San Francisco and since I founded and operate a San Francisco Native Plant Nursery in Golden Gate Park you might say that I am biased in stating that the Maximum Restoration Alternative is the best option for repairing the damage that has been inflicted on San Francisco’s native plant communities. As the biological systems that support the diversity of life continue to deteriorate, our species is beginning to realize that we need to repair the damage now, not later. [Gaar-1-04]
- San Francisco has a responsibility locally, regionally, and globally to protect and enhance the native remnants of this unique city. As reported in the EIR, the Maximum Restoration Alternative is the Environmentally Superior Alternative and should be pursued. [Holzman-1-07]

Response AL-4

These comments express support for the Maximum Restoration Alternative, and one of the commenters also noted that participating in habitat restoration activities is a form of recreation. None of these comments address the adequacy or accuracy of the analysis contained in the Draft EIR.

The Draft EIR’s summary chapter erroneously identified the Maximum Restoration Alternative as the Environmentally Superior Alternative. As correctly stated on Draft EIR p. 526, the Maintenance Alternative is considered the Environmentally Superior Alternative. A thorough analysis of the Environmentally Superior Alternative is provided on Draft EIR pp. 524 to 526, which states that:

“The Maximum Recreation and Maintenance Alternatives are the environmentally superior alternatives because they have fewer unmitigated significant impacts than either the proposed project or the Maximum Restoration Alternative. Between the Maximum Recreation Alternative and the Maintenance Alternative, the Maintenance

Alternative would be the environmentally superior alternative for two reasons. While the two alternatives have the same number of significant and unavoidable impacts under CEQA, the Maintenance Alternative has fewer potential environmental effects than the Maximum Recreation Alternative. First, the Maintenance Alternative would not create new trails, the construction of which could result in impacts to sensitive habitats and other biological resources. Second, over time the Maximum Recreation Alternative would result in Natural Areas with less native plant and animal habitat and a greater amount of nonnative urban forest coverage. The Maintenance Alternative, on the other hand, would preserve the existing distribution and extent of biological resources, including sensitive habitats. For these reasons, the Maintenance Alternative is the environmentally superior alternative.”

As also discussed in Response AL-10, RTC p. 4-595, the text on Draft EIR p. 2 (line 8) has been changed, as follows:

The ~~Maximum Restoration~~ Maintenance Alternative is the Environmentally Superior Alternative.

Comment AL-5 Opposition to the Maximum Restoration Alternative
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The response to Comment AL-5 addresses all or part of the following individual comments:

MPIC-1-02

Tank Hill Neighbors-1-03

Drechsler-1-02

Fong-1-01

Lapins-1-03

Rotter-E-1-04

- We absolutely oppose the Maximum Restoration Alternative because it involves even more tree removal than the proposed project total of 1600 trees and would thus maximize the negative impact on Park recreational use and appearance. [MPIC-1-02]
- We are opposed to the Maximum Restoration Alternative. The Natural Areas Program does not seem to have sufficient staff to take care of the existing natural areas. Furthermore, they are not supervising the volunteers who are sometimes engaging in what amounts to vandalism in the natural areas. It is not realistic to expect the Natural Areas Program to expand their active restoration efforts into the MA-3 areas. Given the severe economic constraints on public funding, it is not feasible, nor would it be beneficial, to expand the staff of the Natural Areas Program. [Tank Hill Neighbors-1-03] [Lapins-1-03]
- The plan to “Maximize Restoration” is dangerous and irreparable. At very least you should make sure that our residents know about this radical plan and are prepared to deal with its consequences. [Drechsler-1-02]
- While the conservation and preservation of native habitats, plants and species is very important, in my opinion the “Maximum Restoration Alternative” places too many restrictions on the current and future recreational needs of San Franciscans. I urge you to adopt a plan that more evenly balances preservation and recreation, either the “No Project Alternative,” the “Maximum Recreation Alternative,” or the “Maintenance Alternative.” [Fong-1-01]

- There is no way the NAP could expand their efforts to another 42% of the parkland in San Francisco, which is what the Maximum Restoration Alternative would require. The city does not have the resources, nor should it have the will, to destroy healthy trees that flourish here – just because they aren’t native. [Rotter-E-1-04]

Response AL-5

These comments express opposition to the Maximum Restoration Alternative and, in some cases support for other alternatives in the EIR. These comments do not raise any specific environmental issues about the adequacy or accuracy of the Draft EIR’s coverage of environmental impacts that require a response in the RTC document under CEQA Guidelines Section 15088. Comments in support or opposition to an EIR alternative will be considered by the decision makers as part of their decision to approve, modify, or disapprove the proposed project. This consideration is carried out independent of the environmental review process.

Comment AL-6	At Mount Davidson, use cypress, cedar, and pine trees
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The response to Comment AL-6 addresses all or part of the following individual comments:

MPIC-1-08

Risk-1-03

Stewart-E-1-02

- Furthermore, if the MRA alternative or some variant of it is adopted, to mitigate the negative impacts on appearance and recreational use, the MPIC insists that all healthy cypress and pine trees in the MA-1c, MA- 2c, and MA-2e areas be allowed to remain. Unlike eucalyptus, these species from the original historic forest are not invasive and add greatly to pleasure of viewing within the Park, as well as hosting a varied bird population that would be lost with their removal. The MPIC further insists that all trees removed from Mt. Davidson as part of SNRAMP be replaced one-for-one within the Park in the locations vacated by the removed trees using cypress, cedar, or pine species in order to maintain the historic visual character of the Sutro forest. The historic cypress and pine species and cedar as well are neither exotic nor invasive, grow much faster than oaks, and are more suited than oaks to survive the soil and climate conditions in Mt. Davidson Park. In fact, oaks never existed on Blue Mountain or Mt. Davidson, so no valid argument can be made for replacement of removed trees with oaks. [MPIC-1-08]
- *According to the NAP plan, some ‘non-native trees’ would be removed and replaced with ‘native’ species. But there is no guarantee that those new trees will be planted in the same location, or even on Mt. Davidson. And there is a strong likelihood that ‘native’ trees such as scrub oaks may not survive on the windy western slope of Mt. Davidson. If there are hazardous or unhealthy eucalyptus trees that need to be removed, we ask that they be replaced with Monterey Cypress, a beautiful non-native tree that already thrives in this location. [Risk-1-03]
- If hazardous or unhealthy trees need to be removed, they should be immediately replaced with Monterey Cypress and more amenities (benches, etc.) should be installed near native plant zones. [Stewart-E-1-02]

Response AL-6

These comments request that if the Maximum Restoration Alternative is approved, or if eucalyptus trees are removed at Mount Davidson, that these trees be replaced with cypress, cedar, or pine species to reduce impacts to historic forests.

As described on Draft EIR p. 140, all of the invasive trees to be removed at Mount Davidson are eucalyptus; pine and cypress trees are not proposed for removal in this Natural Area. At Mount Davidson a total of 1,600 blue gum eucalyptus trees are proposed for removal over the next 20 years within management areas MA-1c, MA-2c, and MA-2e. Other actions in these management areas include: maintaining and enhancing the pacific reed grass and prairie-scrub mosaic, maintaining and enhancing cypress, oak trees and berry-producing scrub while augmenting and introducing sensitive plant species. With respect to the commenters' requests to replace eucalyptus trees with cypress, cedar, or pine species, as stated on SNRAMP p. 6.2-8, eucalyptus trees are being removed to allow additional light to reach the sensitive coastal scrub and reed grass communities that exist at the forest floor, allowing these communities to both persist and expand. Approximately 1,600 of an overall 11,000 trees on Mount Davidson would be removed from MA-1 and MA-2 areas, and approximately 9,400 trees would remain in the urban forest at Mount Davidson. Tree removal activities would retain scattered large individuals in order to minimize large scale disturbance and disruption to wildlife and to promote a gradual conversion to reed grass prairie.

In the case of Mount Davidson, of the approximately 40 acres located in this Natural Area, approximately 30 acres are "urban forest," a term used to describe the eucalyptus-dominated forest. Tree removal and thinning for habitat preservation and effective opening of the understory would occur only within nine acres, or approximately 30 percent of the 30-acre urban forest. No tree removal would occur in the remaining 21 acres of urban forest. As a result, 70 percent of the urban forest at Mount Davidson would remain as is.¹⁶⁷

With respect to the proposed activities at Mount Davidson, Management Recommendation MD-1e, provided on SNRAMP p. 6.2-9, seeks to reduce the potential for local extinction of sensitive species in San Francisco by considering the reintroduction of rare plants such as beach paintbrush (*Castilleja wightii*) (MA-1a), meadow white (*Cerastium arvense*) (MA-1a), coast larkspur (*Delphinium decorum*) (MA-1a), western goldenrod (*Euthamia occidentalis*) (MA-1a), thimbleberry (*Rubus parviflorus*) (MA-2c to MA-2e, MA-1b and MA-1c), and blue violet (*Viola adunca*) (MA-1a), western choke cherry (*Prunus virginiana*) (MA-2c and MA-2e), fairy bells (*Disporum hookeri*) (MA-1b and MA-1c), Raven's manzanita (all MA-1 areas), and Franciscan manzanita (all MA-1 areas).

The Draft EIR evaluated the potential for tree removal to impact potentially historic forests. As described in Impact CP-2, the Draft EIR determined that impacts to potentially historic forest

¹⁶⁷ <http://sfrecpark.org/parks-open-spaces/natural-areas-program/natural-areas-faqs/>, accessed on August 6, 2014.

landscapes from removal of trees and vegetation would not result in a substantial adverse change and that this impact was determined to be less than significant. Refer to Response CP-8, RTC p. 4-265, for a further discussion of the impacts of tree removal on the historic Mount Davidson area and Response CP-9, RTC p. 4-270, for a discussion of cultural landscapes at Mount Davidson. The Draft EIR also determined that impacts of tree removal on aesthetics were less than significant (Impact AE-4, Draft EIR pp. 191 to 195). Accordingly, no mitigation measures are necessary. Refer to Response AE-1, RTC p. 4-219, for a discussion of the aesthetic impact of tree removal. Under CEQA, an EIR need only identify and analyze a reasonable range of project alternatives that would reduce or eliminate the significant environmental impacts of the proposed project; therefore, an alternative designed to replace removed trees with cypress, cedar or pine species is not required to be analyzed in this EIR.

One of the commenters specifically mentions the Maximum Restoration Alternative, which would remove more invasive trees and vegetation than the proposed project, but would also revegetate these areas with native plants. With respect to cultural resource (historic landscape) impacts under the Maximum Restoration Alternative, Draft EIR pp. 482 and 483 states that:

“Impacts on cultural and paleontological resources are similar to those under the proposed project and possibly greater as a result of more aggressive habitat restoration, which would remove more nonnative and invasive vegetation. However, those impacts resulting from recreation aspects of the SNRAMP, such as trail construction, would be removed, so impacts on cultural and paleontological resources under the Maximum Restoration Alternative would be relatively similar to those of the proposed project. Programmatic large-scale projects and routine maintenance activities would continue to have the potential for significant impacts on cultural and paleontological resources; however, these impacts would be reduced to less than significant by implementing mitigation measures similar to those developed for the proposed project.”

In terms of aesthetic impacts under the Maximum Restoration Alternative, Draft EIR p. 482 states the following, with one word changed to correct a typographical error:

“The Maximum Restoration Alternative would have aesthetic impacts similar to those under the proposed project but with moderately more invasive vegetation and tree removal projects. Therefore, although the types of aesthetic impacts are similar to those of the proposed project, the magnitude of those impacts on scenic resources in the Natural Areas and on the visual character or quality of the Natural Areas would be greater than under the proposed project because the Maximum ~~Recreation~~Restoration Alternative would result in more changes to vegetation. However, invasive tree and vegetation removal would be followed by revegetation with native plants, so, overall, the Natural Areas would continue to be characterized as relatively undeveloped landscapes that allow for recreation. As evidenced in the visual simulations under the proposed project at Sharp Park and Mount Davidson, tree removal would not result in noticeable changes to the visual character or quality of the Natural Areas and would not

have a substantial adverse effect on a scenic vista. Even with a moderately greater number of trees removed, as proposed under the Maximum Restoration Alternative, tree removal, which would be followed by revegetation with native trees and other native plants, would not significantly affect scenic views or vistas and would not result in a substantial demonstrable impact on the visual character or quality of the Natural Areas. Similar to the proposed project, under the Maximum Restoration Alternative, new trees would be placed in the Natural Areas to preserve important viewsheds and vistas. As such, the Maximum Restoration Alternative would have less than significant aesthetics impacts.”

In response to the critical habitat designation, SFRPD offered a comment letter to the USFWS, requesting that the designated areas should be limited to MA-1 and MA-2 land, which provides the highest conservation value, rather than MA-3 land, which is primarily for higher intensity recreational use. In response, for Corona Heights and Bernal Hill, the USFWS eliminated the existing off-leash DPAs from the designated critical habitat areas.

4.E.3 Maximum Recreation Alternative

Comment AL-7	Support for Maximum Recreation Alternative
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The response to Comment AL-7 addresses all or part of the following individual comments:

NPS-1-02	MPIC-1-01	Demetrious-1-01
Form Letter-1-22	Litehiser-1-02	Nelson-1-05
PH-Emanuel-01		

- Maximum Recreation Alternative (pg. 498): Please clarify the sentence under “Recreation”: “However, under this alternative, Natural Areas Program staff would continue routine maintenance, which would ensure that the physical deterioration of recreation facilities (trails, DPAs, and other facilities) would not be substantially degraded.” [NPS-1-02]
- If required to choose among the alternatives in the DEIR for SNRAMP, the MPIC must urge adoption of the more reasonable Maximum Recreation Alternative (MRA) of the SNRAMP for Mt. Davidson Park because this alternative involves substantially less invasive tree removal, and thus mitigates the extensive and unavoidable impact on this important recreation and cultural resource that the more radical alternatives will involve. [MPIC-1-01]
- I support the maximum recreation alternative because I believe that natural areas are important public spaces in our urban fabric. They promote, relaxation, rejuvenation, and recreation and offer a unique connection with the natural world. I can speak for myself and say that I would not do well or thrive in such a densely urban setting without access to our precious natural spaces. Our natural areas mean the world to me. In modern architecture, the importance of bringing the natural into the urban is becoming recognized as increasingly important as the scale of urbanization grows worldwide. [Demetrious-1-01]

- As founder/advisor of Give a Dog a Bone (www.gadab.org) and guardian of three well-behaved trained dogs, I know firsthand how exercise positively impacts dog behavior; and conversely, the lack of exercise creates frustrated dogs with high probability of losing good social skills. I wholeheartedly support the Maximum Recreation Alternative. Thank you. [Form Letter-1-22]
- The current trend in our city planning is to provide more housing and increase density (Park Merced development is a good example), this mean we will need to have more accessible open space for recreation and park enjoyment, not less. [Litehiser-1-02]
- I fully support the Maintenance or Maximum Recreational Alternative and urge you to do the same. [Nelson-1-05]
- I am for the maximum recreational alternative, and I just wanted to point out the Golden Gate National Recreational Area just proposed a dog management plan, and they forcefully cited the dog play areas in the San Francisco parks as alternatives.

So if those areas are closed, like the maximum plan is suggesting, people with dogs will not have places to take their animals for exercise with them. So I just want to point out that it's – that this plan is just a further reduction of those areas, and please consider allowing our animals to have space because they are compatible with plants. Thank you. [PH-Emanuel-01]

Response AL-7

These comments primarily express support for Maximum Recreation Alternative and do not comment on the adequacy or accuracy of the information contained in the Draft EIR. Comments in support of an EIR alternative will be considered by the decision makers as part of their decision to approve, modify, or disapprove the proposed project. This consideration is carried out independent of the environmental review process.

The Maximum Recreation Alternative as described in Table 20, SNRAMP Alternatives Comparison, Draft EIR pp. 462 to 464, is distinguished from the proposed project and the Maximum Restoration Alternative in that it would not close or reduce existing DPAs and would result in more trail creation that is available for greater recreational multiuse purposes than the proposed project. Conversely, under the Maximum Restoration Alternative, these same areas would emphasize restoration activities, with recreational activities limited to what would occur in association with restoration activities, either in terms of volunteer planting efforts, maintenance, or monitoring.

In response to the commenters request to clarify a sentence regarding the physical deterioration of recreation facilities, the text on Draft EIR p. 498 (beginning with line 11) has been changed, as follows:

However, under this alternative, Natural Areas Program staff would continue routine maintenance, which would ensure that the physical deterioration of recreation facilities (trails, DPAs, and other facilities) would ~~not be substantially degraded~~ be avoided."

4.E.4 Maintenance Alternative

Comment AL-8	Support the Maintenance Alternative
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The response to Comment AL-8 addresses all or part of the following individual comments:

DB-1-02	SFDOG-1-01	SFFA-3-22
Tank Hill Neighbors-1-04	Beemsterboer-1-01	Borden-1-02
Bose-1-14	Bowman-1-01	Buckley-1-05
Buffa-1-01	Buffa-1-03	Caughman-1-01
Cerf-1-01	Cerf-1-03	Chambers-1-05
Chirico-1-02	Coxon-1-01	DeWitt-1-02
Dougherty-1-05	Drechsler-1-01	Emanuel-1-01
Emanuel-2-01	Fasman-1-01	Fasman-1-03
Glikshtern-1-02	Gordon-1-01	Gottesman-1-01
Heldman-1-03	Hooker-1-01	Hooker-1-04
Kalafati-1-02	Kessler-1-13	Kessler-2-13
Klebaner-1-02	Lapins-1-04	Litehiser-1-01
Lorenz-1-01	Mace-1-02	Mar-1-01
McAllister-3-08	Mills-1-03	Miner-1-01
Minsuk-1-01	Minsuk-1-03	Moyer-1-05
Norton-1-02	Perrins-1-01	Pruitt-1-04
Quinn-1-01	Raffaelli-1-02	Reichardt-1-01
Rotter-E-1-01	Rotter-P-1-01	Saltzer-Lamb-1-01
Stafford-1-01	Wilford-1-01	PH-Rotter-P-01
PH-Rotter-P-04	PH-Rotter-N-01	PH-Stephens-01

- Let me get to the point. I am in favor of the Maintenance Alternative. It maintains the “recreation” in city parks and “recreation” is what a city the size of San Francisco needs. [DB-1-02]
- SFDOG supports the Maintenance or Maximum Recreation Alternatives because they protect existing natural areas yet preserve access for people. [SFDOG-1-01]
- **Our support for the Maintenance Alternative is based on the fact that it is the least destructive of the alternatives presented by the DEIR:**
 - > **The Maintenance Alternative will destroy the least number of trees and existing vegetation**
 - > **The Maintenance Alternative will require the least amount of pesticide**
 - > **The Maintenance Alternative will require the least restrictions on recreational access**
 - > **In addition to being the Environmentally Superior Alternative, the Maintenance Alternative is also the only viable and sustainable alternative because:**
 - **The Maintenance Alternative will not require that native plants which are no longer adapted to present conditions be planted where they will not grow**

- **The Maintenance Alternative will not require that the City of San Francisco substantially increase the budget of the Natural Areas Program so that native plant gardens can be expanded**

1. The Maintenance Alternative will have less negative impact on the environment

The Natural Areas Program (NAP) has destroyed hundreds of trees in the “natural areas” in the past 15 years. The destruction of these trees has given NAP the opportunity to demonstrate that removing trees is beneficial to native plants. In fact, there is little evidence that the destruction of trees has resulted in successful native plant gardens.

The Pine Lake “natural area” is an example of the destruction of trees which did not result in a successful native plant garden. In 2004, about 25 trees were destroyed at the western end of Pine Lake. This destruction is documented by the Hort Science report of December 2011 (“Stern Grove-Pine Lake Park, Parkside Square tree risk assessment”). This report was written as an update on Hort Science’s comprehensive assessment of all trees in Stern Grove-Pine Lake in 2003, in preparation for finally removing the hundreds of trees that had been evaluated as hazardous 8 years before. Here is what Hort Science found at the “West end of the park, near Wawona and 33rd Ave:” **“This area had a number of trees removed by the Natural Areas Program.”**

The area in which the trees were destroyed was then planted with native plants and surrounded by the limbs of the trees that were destroyed. This is what that garden looked like in May 2008, four years later:

Little remains from that effort. This is not an isolated example of the results of 15 years of attempting to restore native plants in places where they have not existed for over 100 years. In addition to the 25 healthy trees that were destroyed at the western end of Pine Lake, 132 trees judged as hazardous were destroyed around the lake in 2006 (these tree removals are documented in SNRAMP). The southern and northern shores of Pine Lake have been planted repeatedly. These areas are now dominated by foxtails and non-native nasturtiums which are thriving, despite being eradicated repeatedly.

Other parks have had similar experiences in their “natural areas.” Sometimes toxic herbicides are used in the attempts to eradicate the non-native plants. Here is a picture of a field of oxalis and mustard in Glen Canyon Park that has been sprayed with toxic Garlon numerous times. There is no evidence that these non-native plants have been defeated by this chemical warfare.

According to “UC [Davis] IPM Online”², Garlon only poisons the visible part of the plant; it doesn’t kill the root of the plant (in this case, the “bulbil”). So, the plant grows back the next year and is poisoned again. Between March and October 2010, the Natural Areas Program and its contractors (Shelterbelt Builders) sprayed Glen Canyon with herbicides 10 times. If this futile effort continues, it will be sprayed again every year, for as long as the public is willing to tolerate this poisoning of its public parks. There is a creek at the bottom of this canyon that is probably being poisoned as well. According to the federally mandated Material Safety Data Sheet for Garlon, it is “highly toxic” to aquatic life. Alongside the creek

is a day camp that is attended by children year around. Do their parents realize that this toxic chemical is being sprayed repeatedly in proximity of their children?

More fortunate “natural areas” have essentially been abandoned by the Natural Areas Program. Tank Hill has not been gardened by the NAP staff for several years. It has been spared the spraying of herbicides. However, it is visited by an unsupervised volunteer who hacks at the trees that remain. In other words, so many acres of parkland have been designated as “natural areas” that the staff is unable to garden them and is unable to supervise the volunteers who are free to do whatever they want in them, including mutilate trees.

2. The conditions that supported native plants in San Francisco have changed

One of many questions that was asked during the public comment period for the Initial Study was: is it still possible to sustain native plant gardens in San Francisco, given the radical changes in underlying conditions, e.g., higher levels of Carbon Dioxide, higher temperatures resulting from climate change and urban heat effect, changes in soil such as increased nitrogen levels and as a result of non-native vegetation, etc.?

This is one of many questions that were raised at the time of the Initial Study that are neither acknowledged nor answered by the DEIR. We will therefore ask and answer this question because it is our last opportunity to do so. The evidence that the ranges of native plants and animals have changed is overwhelming. We should not be surprised that the Natural Areas Program has had little success in achieving their goals after 15 years of effort. NAP and its supporters would like the public and the City’s policy makers to believe that its lack of success is because they are not adequately funded.

Even if the City had the resources to substantially increase the staff of the Natural Areas Program--and chose to use them for that purpose--we would not see a substantially different outcome from their efforts. To demonstrate the futility of this effort, we turn to the living roof on the California Academy of Sciences.

When the California Academy of Sciences reopened in Golden Gate Park in August 2008, its “living roof” was considered its most unique feature. Thirty species of native plants were candidates for planting on the roof. They were planted in test plots with conditions similar to the planned roof and monitored closely. Only nine species of native plants were selected for planting on the roof because they were the only plants that were capable of self-sowing from one season to the next, implying that they were “sustainable.” A living demonstration of “sustainability” was said to be the purpose of the living roof.³

So what have we learned from the living roof about the sustainability of native plants in San Francisco? Two of three of the predominant species on the roof after 2-1/2 years were native. The third--moss--is a “cosmopolitan” species that occurs everywhere. It is not considered native or non-native. It was not planted on the roof and therefore should be considered “invasive” in this context. The Academy’s monitoring project has divided the roof into four quadrants. By February 2011, non-natives outnumbered natives in two of the quadrants.

Although natives outnumbered non-natives in the other two quadrants which are actively gardened, non-natives were also growing in these quadrants.⁴

The consultant hired by the Academy to plan the roof garden, Rana Nursery, advised the Academy to walk the streets of San Francisco and identify the plants growing from the cracks in the sidewalks. These are the plants he advised the academy to plant because these are the plants that are adapted to current conditions in the city. The academy rejected this advice because they were committed to planting exclusively natives on the roof.

The designer also advised the academy not to irrigate the roof, because the point of the roof is that it is a demonstration of sustainability. Again, the academy refused because they knew that without irrigation most of the native plants would be brown during the dry season, roughly half the year. (In fact, it is not clear that the plants would even survive without irrigation.) They wanted the public to believe that the plants that are native to San Francisco are beautiful year around.

There is a lesson here for anyone who is willing to learn from it. The living roof is not natural because it is irrigated and intensively gardened (e.g., weeded, fertilized, replanted, reseeded, etc. 5), yet non-natives not only found their way there on their own, but were dominating it within only 2-1/2 years. Native plants are not sustainable in San Francisco without intensive gardening effort. The living roof on the Academy is a tiny fraction of the acres that have been designated as “natural areas.” The Academy is one building in Golden Gate Park. All of Golden Gate Park is about the same acreage as all of the 1,100 acres of “natural areas.”

Peter Del Tredici has been telling us this for several years. He is a Senior Research Scientist at the Arnold Arboretum at Harvard University and a Lecturer in the Department of Landscape Architecture at the Harvard Graduate School of Design.

In a recent publication, he advises the managers of public lands in urban areas to abandon their fantasy that native plants are sustainable in urban settings:

“The notion that self-sustaining, historically accurate plant associations can be restored to urban areas is an idea with little credibility in light of the facts that 1) the density of the human populations and the infrastructure necessary to support it have led to the removal of the original vegetation, 2) the abiotic growing conditions of urban areas are completely different from what they were originally; and 3) the large number of non-native species that have naturalized in cities provide intense competition for the native species that grew there prior to urbanization.”⁶

Sure, he says, we can grow native plants, but they require at least the same amount of effort as growing any other plant and are therefore just another form of gardening: “Certainly people can plant native species in the city, but few of them will thrive unless they are provided with the appropriate soil and are maintained to the same level as other intentionally cultivated plants.”

He concludes that native plant advocates are making a “cultural value judgment:”

“... people are **looking at the plant through the subjective lens of a cultural value judgment which places a higher value on the nativity of a given plant than on its ecological function.** While this privileging of nativity may be appropriate and necessary for preserving large wilderness areas or rare native species it seems at odds with the realities of urban systems, where social and ecological functionality typically take priority over the restoration of historic ecosystems.”

Conclusion

Although the Maintenance Alternative is the least destructive of the alternatives considered by the DEIR, the closure of the Natural Areas Program would be less destructive than the Maintenance Alternative

- > **The Natural Areas Program has had 15 years to demonstrate that destroying trees and spraying our parks with herbicides will enable them to recreate sustainable native plant gardens. They have failed.**
- > **NAP has little to show for the destruction of hundreds of healthy trees, the use of gallons of toxic herbicides, and the investment of millions of dollars of taxpayers’ money.**
- > **At a time of extreme economic sacrifice, it is unseemly to suggest that further destruction of trees, poisons spread and money squandered would be worthwhile.**
- > **Furthermore, greater sacrifice of money, trees, public safety, and recreational access will not result in sustainable native plant gardens.**

The environmental impacts of the Proposed Project, No Project, and Maximum Restoration Alternatives are significant and the final EIR must judge them as such in these categories: Aesthetics, Wind and Shadow, Recreation, Biological Resources, Hydrology and Water Quality, Hazards and Hazardous Materials, and Air Quality. [SFFA-3-22]

- **We support the Maintenance Alternative because it will do the least damage to the environment. Fewer trees will be destroyed and less pesticide will be needed to destroy more non-native plants and trees. The native wild flowers on Tank Hill are thriving in the company of non-native trees. We would be happy to have more native plants on Tank Hill, but we do not believe that it is necessary to destroy trees for that purpose. [Tank Hill Neighbors-1-04] [Lapins-1-04]**
- **Please support the maintenance alternative – the environmentally superior option in planning for rec and park. Dog play areas, already limited will be more limited with other approaches. [Beemsterboer-1-01]**
- **The Maintenance Alternative is the best choice. It has the least environmental impact and minimizes resources spent on the Sisyphean battle against invasive species. [Borden-1-02]**

- The Maintenance Alternative appears to be the most rational option:
 - > the Environmentally Superior alternative;
 - > lower investment of time and money required;
 - > lowered requirement for pesticides compared to the Proposed Project;
 - > and in terms of potential outcomes that are aesthetically pleasing and ecologically viable. [Bose-1-14]
- I support the Maintenance Alternative or the Recreation Alternative. San Francisco city-managed parks are landmarks and part of our communities' identities and health and well-being. Preserving existing native plant communities should be supported but that should not include restoring 1/3 of our small parklands to native plants and displacing recreation and our existing landscape and nature. [Bowman-1-01]
- I support the Maintenance or Maximum Recreation Alternative, which the EIR identifies as being environmentally superior alternatives. [Buckley-1-05]
- I'm writing to respond to the Natural Areas Program Environmental Impact Review. I strongly oppose the expansion of the Natural Areas Program and support the maintenance alternative described in the EIR. [Buffa-1-01] [Cerf-1-01] [Fasman-1-01] [Hooker-1-01] [Minsuk-1-01] [Perrins-1-01]
- I urge you to implement the maintenance alternative and not to implement the maximum restoration alternative or any other alternative that will take away recreational space in San Francisco city parks. [Buffa-1-03] [Cerf-1-03] [Fasman-1-03] [Hooker-1-04] [Minsuk-1-03]
- I am concerned about preservation of both native and non-native resources discussed in the proposed EIR for Significant Natural Resource Areas Management Plan. The alternative I favor is the Maintenance Alternative because the proposed tree removal carries danger of erosion and loss of habitat, especially for birds and insects. Please forward my comments to the commissioners voting on the alternatives presented in the draft EIR. [Caughman-1-01]
- I would, however, endorse the Maintenance Alternative in the EIR. Under this alternative, Rec and Park would continue current management plans at the natural areas, but would not convert any more non-native habitat to native habitat. The current distribution of native and non-native plants would be preserved. Fewer trees would need to be cut down, and there would be no closures of or reductions in any off-leash areas. No trails would be closed, but no new trails would be created. The NAP EIR identifies this alternative as the Environmentally Superior alternative, because it has fewer unmitigated impacts on the environment than the other alternatives considered in the EIR. Implementing the Maintenance Alternative would result in less damage to the existing environment in natural areas, yet would preserve existing native species, and is the only alternative that is sustainable over the long term. [Chambers-1-05]
- I support the Maintenance Alternative as being the "environmentally superior" option (Rec and Park's own word) [Chirico-1-02]

- I am writing to lend my support to Maintenance Alternative for our city parks and GGNRA open lands for use by all citizens and also those with canine companions. I live in Pacifica which is surrounded by open land mostly GGNRA land and the restoration processes by the Park Conservancy, et al. These urban areas need to be kept available for recreational use by the people who live in the neighborhoods and in these towns and cities. The wildlife also inhabiting these areas have coexisted with the human inhabitants for decades and would continue to successfully coexist if not for human intervention. I have never understood the intent to make these areas like Fort Funsten and Mori Point exclusively native plant restoration areas to the exclusion of all other recreational activity enjoyed by the citizens of San Francisco and San Mateo counties and beyond. It would seem that having healthy, available and safe recreation for people and their dogs should have precedence over plants that are thriving in many other locations around the area that are not used by people and dogs. Why can't we have a few places to go where dogs can run and be dogs? It makes for a much healthier community for both the dogs and their handlers. [Coxon-1-01]
- I strongly support the Maintenance Alternative, which maintains recreation in city parks at the same time as supporting the Natural Areas Program. [DeWitt-1-02]
- I fully support the Maintenance or Maximum Recreational Alternative and urge you to do the same. [Dougherty-1-05]
- I urge San Francisco's Planning Department to choose the "Maintenance Alternative" when developing plans to manage San Francisco's Parks and open spaces. I advise for these practical reasons: The EIS "Summary of Environmental Effects" (Pg. 3, Table 1) shows the "proposed project" and the "Maximum Restoration Alternative" have significant impacts on 42% (6 or 14) of the environmental categories being considered. [Drechsler-1-01]
- I am a 23-year resident of San Francisco and avid user of city parks, which I think are managed relatively well. I support the Maintenance Alternative for the Natural Areas Program because it is environmentally superior. [Emanuel-1-01] [Emanuel-2-01]
- But since it's not likely to happen: MAINTAINCE ALTERNATIVE is the only acceptable alternative - at least, hopefully, no additional (plenty has been done already) harm will be done. [Glikshtern-1-02]
- I'm writing to oppose the expansion of the Natural Areas Program and to voice my support for the maintenance alternative described in the Environmental Impact Review.
Please strongly consider implementing the maintenance alternative in the Environmental Impact Review. I very much appreciate your consideration of this issue. [Gordon-1-01]
- I support the Maintenance Alternative to allow dogs to play freely in parks while being environmentally sound. [Gottesman-1-01]
- I favor the Maintenance Alternative. [Heldman-1-03]
- I think that a maintenance plan should be the only good alternative. [Kalafati-1-02]
- The "Maintenance Alternative", as stated in the Draft Environmental Impact Report on page 526, states that this is the Environmentally Superior Alternative because it has the least

negative impact on the environment of all alternatives. Of these alternatives, I am advocating the "Maintenance Alternative." [Kessler-1-13] [Kessler-2-13]

- MAINTENANCE ALTERNATIVE is the only acceptable alternative. Personally, I'd like the NAP eliminated all together. [Klebaner-1-02]
- I am strongly in favor of adopting the least restrictive plan I believe this is the Maintenance Alternative. I feel that our parks and open spaces must be as "multi-use" as possible. We need to allow both passive and active recreation in our parks. [Litehiser-1-01]
- I am a frequent user of the SF city parks and support the maintenance alternative. I grew up in SF and my elderly parents are long time residents of the Richmond district. We all enjoy the parks as they are and oppose significant changes in the balance of native vs non-native plants, cutting down trees and underbrush, using toxic chemicals to control invasive plants, and closing 25% of park trails. All of these have a significant impact on my family's quality of life and the recreational value of the parks to my family. [Lorenz-1-01]
- I urge you to implement the maintenance alternative and not to implement the maximum restoration alternative or any other alternative that will take away recreational space in San Francisco city parks. San Francisco is a city with limited open space. I rely on the open spaces we do have to get out into the outdoors and get some exercise. Less recreational space will negatively impact the quality of life in our city. [Mace-1-02]
- From what I've seen, it seems obvious to me that "Maintenance Alternative" is much preferable to a "Maximum Restoration Alternative". I don't see what's inherently better about a "native habitat." We should be going for a natural one, no matter how the plants got here. [Mar-1-01]
- **My support for the Maintenance Alternative is based on the fact that it is the least destructive of the alternatives presented by the DEIR:**
 - > **The Maintenance Alternative will destroy the least number of trees and existing vegetation**
 - > **The Maintenance Alternative will require the least amount of pesticide**

In addition to being the Environmentally Superior Alternative, the Maintenance Alternative is also the only viable and sustainable alternative because:

- > **The Maintenance Alternative will not require that native plants which are no longer adapted to present conditions be planted where they will not grow**
- > **The Maintenance Alternative will not require that the City of San Francisco substantially increase the budget of the Natural Areas Program so that native plant gardens can be expanded**

1. The Maintenance Alternative will have less negative impact on the environment

The Natural Areas Program (NAP) has destroyed hundreds of trees in the "natural areas" in the past 15 years. The destruction of these trees has given NAP the opportunity to

demonstrate that removing trees is beneficial to native plants. In fact, there is little evidence that the destruction of trees has resulted in successful native plant gardens.

The Pine Lake “natural area” is an example of the destruction of trees which did not result in a successful native plant garden. In 2004, about 25 trees were destroyed at the western end of Pine Lake. I documented that destruction (because the trees were not posted as required by department policy) by testifying to the Recreation and Park Commission and submitting the attached letter on May 4, 2004. (see Attachment A) My testimony is also recorded in the minutes of that meeting.

The area in which the trees were destroyed was then planted with native plants and surrounded by the limbs of the trees that were destroyed. This is what that garden looked like in May 2008, four years later:

Little remains from that effort. This is not an isolated example of the results of 15 years of attempting to restore native plants in places where they have not existed for over 100 years. In addition to the 25 healthy trees that were destroyed at the western end of Pine Lake, 132 trees judged as hazardous were destroyed around the lake in 2006 (these tree removals are documented in SNRAMP). The southern and northern shores of Pine Lake have been planted repeatedly. These areas are now dominated by foxtails and non-native nasturtiums which are thriving, despite being eradicated repeatedly.

Other parks have had similar experiences in their “natural areas.” Sometimes toxic herbicides are used in the attempts to eradicate the non-native plants. Here is a picture of a field of oxalis in Glen Canyon Park that has been sprayed with toxic Garton numerous times. There is no evidence that the oxalis has been defeated by this chemical warfare.

According to “UC [Davis] 1PM Online”², Garton only poisons the visible part of the plant; it doesn’t kill the root of the plant (in this case, the “bulbil”). So, the plant grows back the next year and is poisoned again. Between March and October 2010, the Natural Areas Program and its contractors (Shelterbelt Builders) sprayed Glen Canyon with herbicides 10 times. If this futile effort continues, it will be sprayed again every year, for as long as the public is willing to tolerate this poisoning of its public parks. There is a creek at the bottom of this canyon that is probably being poisoned as well. According to the federally mandated Material Safety Data Sheet for Garton, it is “highly toxic” to aquatic life. Alongside the creek is a day camp that is attended by children year around. Do their parents realize that this toxic chemical is being sprayed repeatedly in proximity of their children?

More fortunate “natural areas” have essentially been abandoned by the Natural Areas Program. Tank Hill has not been gardened by the NAP staff for several years. It has been spared the spraying of herbicides. However, it is visited by an unsupervised volunteer who hacks at the trees that remain. In other words, so many acres of parkland have been designated as “natural areas” that the staff is unable to garden them and is unable to supervise the volunteers who are free to do whatever they want in them, including mutilate trees.

2. The conditions that supported native plants in San Francisco have changed

One of many questions that was asked during the public comment period for the Initial Study was: is it still possible to sustain native plant gardens in San Francisco, given the radical changes in underlying conditions, e.g., higher levels of Carbon Dioxide, higher temperatures resulting from climate change and urban heat effect, changes in soil as a result of non-native vegetation, etc.?

This is one of many questions that were raised at the time of the Initial Study that are neither acknowledged nor answered by the DEIR. We will therefore ask and answer this question because it is our last opportunity to do so. The evidence that the ranges of native plants and animals have changed is overwhelming. We should not be surprised that the Natural Areas Program has had little success in achieving their goals after 15 years of effort. NAP and its supporters would like the public and the City's policy makers to believe that its lack of success is because they are not adequately funded.

Even if the City had the resources to substantially increase the staff of the Natural Areas Program – and chose to use them for that purpose--we would not see a substantially different outcome from their efforts. To demonstrate the futility of this effort, we turn to the living roof on the California Academy of Sciences.

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So what have we learned from the living roof about the sustainability of native plants in San Francisco? Two of three of the predominant species on the roof after 2-1/2 years were native. The third – moss--is a "cosmopolitan" species that occurs everywhere. It is not considered native or non-native. It was not planted on the roof and therefore should be considered "invasive" in this context. The Academy's monitoring project has divided the roof into four quadrants. By February 2011, **non-natives outnumbered natives in two of the quadrants.** Although natives outnumbered non-natives in the other two quadrants which are actively gardened, non-natives were also growing in these quadrants.

The consultant hired by the Academy to plan the roof garden, Rana Nursery, advised the Academy to walk the streets of San Francisco and identify the plants growing from the cracks in the sidewalks. These are the plants he advised the academy to plant because these are the plants that are adapted to current conditions in the city. The academy rejected this advice because they were committed to planting exclusively natives on the roof.

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Sure, he says, we can grow native plants, but they require at least the same amount of effort as growing any other plant and are therefore just another form of gardening: “Certainly people can plant native species in the city, but few of them will thrive unless they are provided with the appropriate soil and are maintained to the same level as other intentionally cultivated plants.”

He concludes that native plant advocates are making a “cultural value judgment:”

“... people are looking at the plant through the subjective lens of a cultural value judgment which places a higher value on the nativity of a given plant than on its ecological function. While this privileging of nativity may be appropriate and necessary for preserving large wilderness areas or rare native species it seems at odds with the realities of urban systems, where social and ecological functionality typically take priority over the restoration of historic ecosystems.”

Conclusion

The Maintenance Alternative is the only viable alternative going forward.

- > The Natural Areas Program has had 15 years to demonstrate that destroying trees and spraying our parks with herbicides will enable them to recreate sustainable native plant gardens. They have failed.**

- > **NAP has little to show for the destruction of hundreds of healthy trees, the use of gallons of toxic herbicides, and the investment of millions of dollars of taxpayers' money.**
- > **At a time of extreme economic sacrifice, it is unseemly to suggest that further destruction of trees, poisons spread and money squandered would be worthwhile.**
- > **Furthermore, greater sacrifice of money, trees, and public safety will not result in sustainable native plant gardens.** [McAllister-3-08]
- If an alternative must be chosen, please support the Maintenance or Maximum Recreation Alternatives and please remember these are CITY parks, not Yosemite. [Mills-1-03] [Pruitt-1-04]
- As a responsible dog owner in SF without a backyard, dog walkers and dog parks are a necessity in my life. Please consider the Maintenance Alternative to the City Parks Plan to maintain more space for our furry friends. Thanks! [Miner-1-01]
- 5) I support the Maintenance Alternative, which EIR identifies as being environmentally superior alternatives. [Moyer-1-05]
- As such, I support the "Maintenance Alternative" which Parks & Recreation has designated the environmentally superior option. [Norton-1-02]
- That said, my request is the maintenance alternative of the EIR be adopted. It is the most realistic and healthy option. [Quinn-1-01]
- With this in mind, I ask you to implement the maintenance alternative and not the maximum restoration alternative or, for that matter, any alternative which reduces recreational space in our city. I would point out that adding recreational areas in Crocker Amazon playground has done wonders for the tenor of the park. It's a popular and welcoming spec compared to what it was five years ago. [Raffaelli-1-02]
- I support the Maintenance Alternative in the EIR. [Reichardt-1-01]
- In the Draft Environmental Impact Report (DEIR) that is now under consideration, four different alternatives are given: Proposed Project, Maximum Recreation, Maximum Restoration, Maintenance. ONLY the Maintenance Option is a supportable ecological program, as the DEIR states [Rotter-P-1-01]
- Contrary to what it says on page 2 of the Summary of the EIR, the preferred alternative of the EIR is the Maintenance Alternative. And we agree with that choice. [Rotter-E-1-01]
- As a San Francisco resident (and a City employee), I would like to ask you for your help in supporting the Maintenance Alternative plan as an answer to the issue facing SF dog owners and walkers. [Saltzer-Lamb-1-01]
- I am writing in support of the maintenance plan. I was in favor of preserving natural areas in San Francisco when the plan first started, and when I thought these areas were a few out of the way pockets of land, but I don't want to see the areas San Franciscans need for recreation being turned into native plant habitats. We city dwellers don't have big suburban backyards

in which to play; our parks are where we go to run around, throw frisbees, toss balls, etc. I am in favor of lots of grass meadows with surrounding trees and flowers. [Stafford-1-01] [Wilford-1-01]

- For these reasons the maintenance alternative is environmentally superior alternative. That's not what's being proposed by this EIR. The EIR is proposing that you adopt a program that is environmentally least good. [PH-Rotter-P-01]
- We should be going into a more environmentally protected type of alternative, and that is maximum maintenance of the existing environment. [PH-Rotter-P-04]
- Hi, I'm Neaf Rotter, and I agree with my husband that the maintenance alternative would be the very best way to go for San Francisco. [PH-Rotter-N-01]
- We obviously support the maintenance or maximum recreational alternatives because they protect existing natural areas yet preserve access for people. [PH-Stephens-01]

Response AL-8

These comments primarily express support for the Maintenance Alternative. Commenters express support for the Maintenance Alternative for a variety of reasons including lower levels of herbicide and pesticide use, and claims that NAP restoration efforts thus far have been unsuccessful.

The Draft EIR analyzes potential environmental impacts from the use of herbicides and pesticides within Section V.G, Biological Resources; Section V.H, Hydrology and Water Quality; and Section V.I, Hazards and Hazardous Materials. The SNRAMP also includes a monitoring plan to assess effectiveness of restoration efforts, would include an adaptive management approach, as described on Draft EIR p. 90, that evaluates the success of those efforts and modifies implementation strategies, priorities and methods based on that evaluation. Comments in support of an EIR alternative will be considered by the decision makers as part of their decision to approve, modify, or disapprove the proposed project. This consideration is carried out independent of the environmental review process.

Commenters are correct that the environmentally superior alternative was determined to be the Maintenance Alternative for the reasons discussed on Draft EIR pp. 524 to 526; this determination is made considering all environmental topics analyzed under CEQA.

The SNRAMP does not propose the removal of any trees at Pine Lake. In terms of the previous tree removal activities at Pine Lake, they are not within the scope of this project and, therefore, are not addressed in this EIR. However, in terms of the general concept of replacing nonnative trees with native species in order to increase biodiversity, refer to Response PD-11, RTC p. 4-159. Refer also to Response HZ-1, RTC p. 4-531, for a discussion of the use of pesticides in the Natural Areas; Response G-6, RTC p. 4-34, for a discussion of previous successful restoration projects undertaken by the SFRPD; Response AL-12, RTC p. 4-605, for a discussion of choosing feasible alternatives over

the proposed project; and Response AL-13, RTC p. 4-606, for a discussion of alternatives of reducing, redirecting, or shutting down the Natural Areas Program.

Comment AL-9	Support minimum activity
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The response to Comment AL-9 addresses all or part of the following individual comments:

Art-1-01	Cook-1-01	Delacroix-1-01
Fox-1-01	Jungreis-1-01	Koury-1-01

- I support the MINIMUM of NAP activity in our parks and open space. NAP jurisdiction should not be expanded beyond their already invasive areas of activity. [Art-1-01] [Cook-1-01] [Delacroix-1-01] [Fox-1-01] [Jungreis-1-01]
- I support the MINIMUM of NAP activity in our parks and open space. NAP jurisdiction should not be expanded beyond their already invasive areas of activity.

The Natural Areas Program defines "natural areas" as areas planted only with plants that grew here when San Francisco was all sand and sand dunes. Before our city was built. Before our lush parks were created.

This narrow definition of what is "natural" is absurd. A natural area should be defined by the amount of wildlife it supports. By this definition, our parks are natural areas.

Why on earth would we want to return our parks to sand with tiny sand dune plants and coastal scrub when our parks have such incredible natural beauty and support such an incredible diversity of wildlife?

San Francisco is a bird watcher's paradise. The hawks and owls that nest in monterey cypress and pine trees cannot nest in any of the four (tediously slow growing) San Francisco "native" trees.

Pines and Cypress are the backbone trees of our parks. They're not only beautiful, but provide habitat for countless species of wildlife. Removing these trees because they're "not native" would be criminal.

Removing the plants that generations of gardeners have planted and tended to return these areas to sand, planted only with "native" coastal dune plants would decrease wildlife biodiversity. NOT increase wildlife biodiversity.

We should not remove any existing vegetation (never mind 1100 acres, 1/3 of our parklands) to return these acres back into sand, with only coastal scrub plants.

I love the lush vegetation in our parks and do not want ANY of it removed for any reason – but particularly for the ridiculous reason that a radical group (funded with my tax dollars) defines "natural" as only what was here before the city of San Francisco was built, and before our beautiful parks were created.

As SF's population continues to grow and more large housing developments are planned, demand for recreation and relaxing in our parks increases.

The Natural Areas Program fences off the areas that they first denude then plant with insignificant / tiny dune plants to create their plant museums.

Spending tax dollars to take away recreation areas from residents is outrageous.

I want more Rec and Park gardeners hired and less staff positions paid to the Natural Areas Program, who are intent on removing the lush vegetation that I enjoy in our parks.
[Koury-1-01]

Response AL-9

These comments express support for a minimal amount of NAP activities, which most closely resembles the Maintenance or No Project Alternatives.

Refer also to Response G-6, RTC p. 4-34, for a discussion of an alternative that would result in the removal of Natural Areas from the NAP. These comments do not raise any specific environmental issues about the adequacy or accuracy of the Draft EIR's coverage of environmental impacts that require a response in the RTC document under CEQA Guidelines Section 15088. Comments in support of an EIR alternative will be considered by the decision makers as part of their decision to approve, modify, or disapprove the proposed project. This consideration is carried out independent of the environmental review process.

4.E.5 Environmentally Superior Alternative

Comment AL-10 Environmentally Superior Alternative

The response to Comment AL-10 addresses all or part of the following individual comments:

CBD-1-04	CNPS-1-05	MPIC-2-01
NTC-1-02	SFFA-3-23	SFT-1-03
Sierra Club-1-04	Bose-1-01	Form Letter-1-05
Gerrie-1-03	Ghosh-1-06	Gravanis-1-01
Kessler-1-15	Kessler-2-15	Kushner-1-03
Kushner-1-05	Kushner-1-07	Langille-1-07
McAllister-1-01	McAllister-3-09	Pfister-1-05
Reichardt-1-02	Valente-1-01	Wilson-1-04
Yip-1-05	PH-Brastow-02	

- The DEIR analysis is flawed since it identifies recreation and maintenance alternatives as the “environmentally superior alternatives.” [CBD-1-04]
- The statement on page 524 (VII.E - Environmentally Superior Alternative) has this astounding statement: “... In determining the environmentally superior alternative for the proposed project, this EIR considers the environmental effects of the project and project alternatives. The Maximum Recreation and Maintenance Alternatives are the environmentally superior alternatives because ...” I have no idea what this means, but it sounds like a non sequitur. Please revisit this. [CNPS-1-05]

- We agree with the conclusion of the DEIR (page 525) that the Maintenance and Maximum Recreation Alternatives are the Environmentally Superior Alternatives because these alternatives involve removal of substantially fewer trees and less access, as well as less herbicide use. [MPIC-2-01]
- That the recreation and maintenance alternatives are the “environmentally superior alternatives” and neither the restoration nor the proposed project are, may be a function of a misinterpretation of the intent of CEQA, where the protection of wildlife and our natural environment are central to the intent of the legislation. The assumptions made about what defines recreation for this particular DEIR are subjective and not based on best available science about recreation (there are plenty of citations on the web). For the purposes of the SNRAMP DEIR, recreation should include community stewardship, a legitimate form of recreation, practiced by thousands of people every week all over the Bay Area. This could change the balance of purported impacts to recreation, and could, for example, lead to the proposed project being considered to be the environmentally superior alternative. [NTC-1-02]
- **1. The refusal to correct the mistake in the DEIR about the “Environmentally Superior Alternative”**

The Summary of the DEIR at the beginning of the document says that the “Maximum Restoration Alternative” is the “Environmentally Superior Alternative” (page 2). This is a mistake. The “Maximum Restoration Alternative” is NOT the “Environmentally Superior Alternative.” The “Environmentally Superior Alternative” is the “Maintenance Alternative.” The correct statement does not appear in the DEIR until the very end of the document:

“The Maximum Recreation and Maintenance Alternatives are the environmentally superior alternatives because they have fewer unmitigated significant impacts than either the proposed project or the Maximum Restoration Alternative.” Between the Maximum Recreation Alternative and the Maintenance Alternative, the Maintenance Alternative would be the environmentally superior alternative for two reasons. **While the two alternatives have the same number of significant and unavoidable impacts under CEQA, the Maintenance Alternative has fewer potential environmental effects than the Maximum Recreation Alternative.** First, the Maintenance Alternative would not create new trails, the construction of which could result in impacts to sensitive habitats and other biological resources. Second, over time the Maximum Recreation Alternative would result in Natural Areas with less native plant and animal habitat and a greater amount of nonnative urban forest coverage. The Maintenance Alternative, on the other hand, would preserve the existing distribution and extent of biological resources, including sensitive habitats. **For these reasons, the Maintenance Alternative is the environmentally superior alternative.”** (DEIR, page 525-526) (emphasis added)

Attached is the email correspondence with Jessica Range, the staff member in the Planning Department responsible for the environmental review process, about this error. Ms. Range acknowledges the error, confirms that the “Environmentally Superior Alternative” is the

“Maintenance Alternative,” but refuses to correct the error until the public comment period is over. (See Attachment VI-A)

Few readers will read a document that is over 500 pages long. This mistake will therefore mislead the public into supporting the “Maximum Restoration Alternative” which expands the destructive and restrictive aspects of the Natural Areas Program. Furthermore, and perhaps more importantly, this expansion is NOT legal because it violates the requirements of the California Environmental Quality Act (CEQA), which requires that the “Environmentally Superior Alternative” has the least negative impact on the environment of all proposed alternatives:

“§21002. APPROVAL OF PROJECTS; FEASIBLE ALTERNATIVE OR MITIGATION MEASURES

The Legislature finds and declares that it is the policy of the state that **public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects**, and that the procedures required by this division are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects.” CEQA Guidelines, page 2 (emphasis added)

This mistake will profoundly prejudice the public review and comment period. The mistake was exacerbated by the refusal to correct the mistake before the public process was complete.

Although the mistake was verbally acknowledged by the staff of the Planning Department at the beginning of the public hearing on October 6th, it was characterized as a “typographical error.” The dictionary definition of “typographical error” is: “an error in printed or typewritten material resulting from a mistake in typing or from mechanical failure or the like.”¹ It is an insult to the public’s intelligence to characterize the substitution of an entire phrase (“Maximum Restoration Alternative”) for another (“Maintenance Alternative”) as a typographical error. Trivializing this error further misleads the public by failing to acknowledge the substantive differences between these alternatives. The “Maintenance Alternative” is at the opposite extreme from the “Maximum Restoration Alternative” in the range of alternatives.

The “Maximum Restoration Alternative” proposes an expansion of the active restoration efforts of the Natural Areas Program to 100% of all acreage designated as “natural areas.” This represents a 73% increase in the acres subjected to tree removals, herbicide applications, recreational access restrictions, and the planting of endangered plants and animals that could potentially require further access restrictions.

In addition to the inaccurate and misleading identification of the environmentally superior alternative, the public notice of the DEIR was inadequate. No mention was made in the original public notice of the locations of the natural areas that would be impacted by the implementation of SNRAMP. No mention was made of the significant impacts on the

environment such as the removal of thousands of trees or the loss of recreational access. The public notice did not enable the public to understand that the implementation of SNRAMP would have a significant impact on their parks or their neighborhoods.

Conclusion

The public review and comment process was severely compromised by a serious mistake and by several actions of the Planning Department staff. The appropriate legal remedies for these mistakes are:

- > **Correct the DEIR by accurately identifying the “Environmentally Superior Alternative”**
- > **Distribute the corrected DEIR in the same manner as the original was distributed [SFFA-3-23]**
- The identification of the recreation and maintenance alternatives as the "environmentally superior alternatives" rather than either the proposed project or the recreation project, is inappropriate, as it discounts the value of biodiversity as an environmental benefit. [SFT-1-03]
- Alternative analysis needs to be corrected and refined.

In the analysis of alternatives – as has already been pointed out by RPD staff – there is a discrepancy between the introductory summary and the analysis at the end of the report. While this will need to be corrected, the instrumental matrix used to analyze and quantify environmental impacts is methodologically flawed because it accords all impacts to be equal. Thus recreational resources and historical resources are treated the same as biological resources in terms of impacts and mitigations. This is contrary to the legislative intent of CEQA, which places emphasis not so much on incidental impacts but on the preservation of a healthy environment. Especially as the DEIR has already generated much confusion in its analysis of alternatives, it would be useful to include some language explicating the methodology used to determine what constitutes an “environmentally superior” alternative. In addition, some analysis of the alternatives according to which would better accomplish the project’s goals and objectives, in this case biological resource protection, would give decision-makers a more accurate assessment of which alternative is preferable from a certification standpoint. In particular, it is clear from the analysis that the maximum restoration alternative is, with respect to the project’s major goals and purpose, at least the “ecologically superior” alternative. It is also clear that, with the exception of Sharp Park, the over-all impacts of the maximum restoration alternative are only slightly greater than those of the proposed project, while in many instances significantly furthering the plan’s overall objectives. However, this is not all clear in the accompanying analysis, which presents a rather confusing quantification of impacts and mitigations across a broad spectrum of categories. We ask therefore that the final EIR contain language clarifying the purpose and methodology of the alternatives analysis, lest the conclusions be misunderstood, as well as straight-forward language assessing which alternative is superior in terms of natural resource protection. [Sierra Club-1-04]

- Page 2, Section 1B: It's the 'Maintenance Alternative' that was determined to be the Environmentally Superior Alternative on Page 526. [Bose-1-01]
- I support the Maintenance or Maximum Recreation Alternative, which the EIR identifies as being environmentally superior alternatives. [Form Letter-1-05]
- If the environmental superior alternatives are recreation and maintenance, and not restoration, the analysis is flawed. [Gerrie-1-03]
- Support the Maintenance Alternative and the Maximum Recreation Alternative. The NAP EIR identifies them as "environmentally superior." [Ghosh-1-06] [Yip-1-05]
- Environmentally Superior Alternative (p. 524) – The arguments presented for the selection of the Recreation and Maintenance Alternatives as superior to the proposed project and the Maximum Restoration Alternative are not convincing. A reduction in recreational access is not a negative environmental impact, and even if it were the claims of reduced recreational access are exaggerated. Enforcement of the leash law is not a loss of access. Restricting the use of bicycles is not a loss of access. (In fact, some trails will get greater use if walkers don't fear encountering bikes.) Reducing the number of trails in favor of better design and maintenance can improve public access for a greater diversity of park users (as well as reducing maintenance costs and damage from erosion). Also, the Maximum Restoration Alternative could result in greater opportunities for recreational activities such as wildlife observation and hands-on stewardship. Please re-visit the designation of the environmentally superior alternative, especially in the light of a more fully fleshed-out Maximum Restoration Alternative. [Gravanis-1-01]
- Page 2 of your summary needs to be corrected to reflect what page 526 of the Draft says: that the "Environmentally Superior Alternative" is the "Maintenance Alternative." [Kessler-1-15] [Kessler-2-15]
- Table 21 in the dEIR compares the project and the proposed alternatives relative to the various considerations that make up an environmental impact, i.e., Land Use and Land Use Planning, Aesthetics, Cultural and Paleontological Resources, Wind and Shadow, Recreation, Biological Resources, Hydrology and Water Quality, Hazards and Hazardous Materials, Agriculture and Forest Resources, and Air Quality. This list in the dEIR does not grade or weight the considerations; it merely views them as though they were all equal. The legislative intent of the California Environmental Quality Act does not view these considerations as equal. The preservation and enhancement of the environment are more important than these other issues. The evaluation of the different alternatives in the NAP dEIR relative to their environmental impacts should be made in the context of the intent of the CEQA legislation and not treat impact considerations as equals. The most disconcerting aspect of the considerations listed in Table 21 is that all are treated as though each is equivalent to biological resources, and yet this is not according to the legislative intent of the CEQA code. (For example, there is even no mention of "recreation" in the legislative intent.) [Kushner-1-03]

- “The Maximum Restoration Alternative meets some, but not all, of the project objectives presented in Section III.C. Specifically, the Maximum Restoration Alternative does not meet the objective related to recreation, as the Maximum Restoration Alternative would provide additional restrictions on public use and access of the Natural Areas.” “This alternative has impacts similar to those discussed for the proposed project. However, implementing management actions that restore native habitat throughout all Natural Areas would take precedent over implementing management actions for recreation facilities. Compared to the proposed project, this alternative involves no new trails in the Natural Areas, thereby providing reduced recreation opportunities. The Natural Areas Program would continue to promote passive recreation. “This alternative would further reduce the size of existing DPAs, so it could increase the use of the remaining DPAs, potentially resulting in greater physical deterioration of recreation facilities, compared to the proposed project. As with the proposed project, these impacts are expected to be less than significant. Within the cumulative timeframe, the GGNRA Dog Management Plan also would restrict dog use on GGNRA lands that may result in potentially significant and unavoidable cumulative impacts associated with the physical deterioration of the Natural Areas DPAs.” These excerpts demonstrate the crux of the issue of how recreation and public use (i.e., unleashed dogs) are given the same weight as habitat restoration. This is counter to the intent of the CEQA legislation, which nowhere mentions recreation (or dogs or companion animals). [Kushner-1-05]
- Simply stated by the organization, Nature in the City, “If the recreation and maintenance alternatives are the ‘environmentally superior alternatives’ and neither the restoration nor the proposed project are, then this analysis is flawed.” [Kushner-1-07]
- That the recreation and maintenance alternatives are the “environmentally superior alternatives” and neither the restoration nor the proposed project are, is, apparently, an unfortunate paradox of CEQA, where biodiversity is considered no more important than aesthetics or recreation within the human environment. [Langille-1-07] [Pfister-1-05] [Wilson-1-04]
- Thank you for your reply. This error will seriously compromise the public comment period because the majority of readers will be unaware of it. The error is made on page 2 of the document and is therefore prominent to readers. Few, if any readers will read the entire document to find the correct statement that does not appear until page 525 of the document, nearly the last page of the document. The error will profoundly prejudice readers to a project alternative that is not preferred by the environmental analysis. [McAllister-1-01]
- **The refusal to correct the mistake in the DEIR about the “Environmentally Superior Alternative”**

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The "Maximum Restoration Alternative" proposes an expansion of the active restoration efforts of the Natural Areas Program to 100% of all acreage designated as "natural areas." This represents a 73% increase in the acres subjected to tree removals, recreational access restrictions, and the planting of endangered plants and animals that could potentially require further access restrictions.

Conclusion

The public review and comment process was severely compromised by a serious mistake and by several actions of the Planning Department staff. The appropriate legal remedies for these mistakes are:

- > **Correct the DEIR by accurately identifying the "Environmentally Superior Alternative"**
- > **Distribute the corrected DEIR in the same manner as the original was distributed**
- > **Announce another public hearing along with the corrected DEIR**
- > **Announce another deadline for written public comments that is at least as long as the original period**

The public review and comment period for the DEIR for the SNRAMP has been a stunning display of unfair dealing with the taxpayers who are paying for this project. It is experiences such as this that turn taxpayers into protesters. [McAllister-3-09]

- While I am a hundred percent for the betterment of the natural areas in the City of San Francisco, the EIR identifying the Maximum Restoration Alternative as the "Environmentally Superior Alternative" is contradictory to the rest of the evidence presented in the document. I am particularly disappointed to learn that the NAS management plan calls for the destruction of healthy trees even after failed attempts to sustain the native plants. It seems unreasonable to spend any more of taxpayers' money to bring back the plants that simply don't do well in these places that are surrounded by populated urban areas. [Reichardt-1-02]
- This violation of the public confidence is highlighted in the EIR itself. On page 2, the EIR misleads the public by asserting the "Maximum Restoration Alternative" is the "Environmentally Superior Alternative." THIS IS WRONG. When this error was brought to the attention of the SFRPD, they refused to publish a retraction or correction until AFTER the public comment period was over. In reality, the "Maximum Recreation" and "Maintenance Alternative" are the environmentally superior alternatives because they have fewer

unmitigated significant impacts than either the proposed project or the Maximum Restoration Alternative. [Valente-1-01]

- The true environmentally superior alternatives apparently are the recreation and maintenance alternatives, which I find to be quite ironic, considering that we're trying to restore the natural environment. So the project plan – neither the project plan nor the maximum restoration alternative are the environmentally superior alternatives, and I would just like to ask a few questions about that.

What are the assumptions behind those alternatives becoming the environmentally superior alternative? Which human environment are we actually trying to create if the maximum restoration alternative is not the environmentally superior alternative? One where nature conservation is not paramount? [PH-Brastow-02]

Response AL-10

These comments express concern that Draft EIR p. 2 incorrectly identified the environmentally superior alternative and disagree with the Draft EIR's conclusion that the Maintenance Alternative was determined to be the environmentally superior alternative. In addition, one comment expressed specific support for the "environmental superior alternatives."

The commenters are correct that Draft EIR p. 2 ("Summary" chapter) incorrectly identified the Maximum Restoration Alternative as the environmentally superior alternative (although it was discussed fully and accurately in the remainder of the document). The Draft EIR (pp. 524 to 526) correctly identifies the Maintenance Alternative as the environmentally superior alternative and provides a thorough analysis of the project alternatives. As discussed in Response G-10 and Response AL-4, RTC pp. 4-50 and 4-565, as indicated in RTC Section 5.A, Changes in Response to Comments, the text on Draft EIR p. 2 (line 8) has been changed, as follows:

The ~~Maximum Restoration~~ Maintenance Alternative is the Environmentally Superior Alternative.

With regards to identifying the environmentally superior alternative, there is nothing within CEQA or the CEQA guidelines to suggest that one impact analysis be weighed greater than another impact analysis. The "environment" as defined by CEQA means, "the physical conditions which exist within the area which will be affected by the proposed project including land, air, water, minerals, flora, fauna, noise, objects of historic or aesthetic significance. The area involved shall be the area in which significant effects would occur either indirectly or directly as a result of the project. The 'environment' includes both natural and man-made conditions" (CEQA Guidelines Section 15360). Therefore, all impact topic areas were weighed equally in identifying the environmentally superior alternative.

CEQA requires that an EIR identify alternatives to the proposed project that would avoid or substantially lessen the significant environmental impacts of the project. As such, it is often the case that project alternatives have less severe or different environmental impacts than the proposed project. The Draft EIR identified significant unavoidable impacts of the proposed project on

historical resources and air quality, and cumulative recreation, biological resources, and air quality. The cumulative impacts to recreational and biological resources result from the potentially significant combined impacts of the proposed project and the GGNRA Dog Management Plan.

Although the No Project Alternative has less environmental impacts than the proposed project and the other alternatives, CEQA Guidelines Section 15126.6(e) require that where the No Project Alternative is the environmentally superior alternative, the EIR shall identify an environmentally superior alternative among the other alternatives. Therefore, the environmentally superior alternative may only be the Maximum Recreation, Maximum Restoration, or Maintenance Alternative. While the Maximum Restoration Alternative may have greater long-term benefits for biological resources, it would require conversion of additional lands within the Sharp Park Golf Course for habitat restoration, resulting in greater significant and unavoidable impacts to historic resources. The Maintenance and Maximum Recreation Alternatives on the other hand would limit the Laguna Salada Restoration to within the current natural areas boundary, thereby eliminating the significant and unavoidable historic resource impacts of the proposed project. As discussed on Draft EIR p. 526, when the Maximum Recreation Alternative is compared with the Maintenance Alternative, the Maintenance Alternative would not create new trails, the construction of which could result in impacts to sensitive habitats and other biological resources. Additionally, the Maximum Recreation Alternative would result in natural areas with less native plant and animal habitat and a greater amount of nonnative urban forest coverage while the Maintenance Alternative would preserve the existing distribution and extent of biological resources. For these reasons, the Maintenance Alternative was determined to be the environmentally superior alternative under CEQA. This determination is consistent with CEQA, the CEQA Guidelines, and the San Francisco Administrative Code Chapter 31, but should not be confused with identification of an “environmentally superior ecological alternative”; that determination is not required by CEQA.

In terms of how recreation is defined, the Glossary of the Draft EIR has been updated to define recreation as an “Activity done for enjoyment when one is not working. Within the Natural Areas, typical recreational activities include, but are not necessarily limited to, walking, hiking, running, nature watching, dog walking, picnicking, other passive recreational activities, and volunteering.” Further, as stated in Response PD-27, RTC p. 4-203, the SFRPD and the Draft EIR consider community stewardship as a form of recreation.

4.E.6 Alternatives Considered but Rejected

Comment AL-11 Nondredging alternatives for Sharp Park

The response to Comment AL-11 addresses all or part of the following individual comment:

Baye-1-05

- In fact, the DEIR misrepresents the factual condition of Laguna Salada’s long-term sediment and vegetation changes, and the justification for dredging it to “restore” it. There is no

evidence presented to support the DEIR assertion that Laguna Salada suffers from "excess sediments" rather than excessive pumping and drainage to maintain golf greens – lowering of lagoon levels to the point at which the bottom is so shallowly flooded that tules and cattails can invade most of it. Neither the DEIR nor its supporting documents (Appendix I) identify any source of watershed sediment, field evidence of sediment deposition, sediment deposition rates, or mode of transport to deliver terrestrial sediments into the lagoon. The DEIR simply assumes that if cattails and tules are "excessive", it must be due to sedimentation. This is a fallacy. The pumps are set to maintain the lagoon water surface level at less than + 7.5 ft NA VD (Tetra Tech 2009), which results in prevalence of shallow water (3 ft or less deep) across the lagoon bed. This chronic stable drawdown condition makes most of the lagoon bed suitable for progressive long-term spread by tules and cattails, even in the complete absence of any sediment deposition.

The shallowness of the lagoon controlled by the artificial water surface elevation range maintained by pump operations is sufficient to explain the multi-decade encroachment of tules and cattails. There is no direct evidence (sediment cores, bed elevation change, suspended sediment concentration measurements) presented for the hypothesis of that shallowness of the lagoon is driven by increased bed elevations cause by "excess sedimentation" in the lagoon during the period of tule and cattail growth.

The proposed dredging is not really compensating for excessive sedimentation: it is merely a way of compensating for artificially stable low lagoon water levels by lowering the bed instead of raising the lagoon to drown out or inhibit growth of tules and cattails (species with submergence tolerance up to about 4 feet). It is this fallacious, biased analysis of the lagoon's alleged "excessive sedimentation" and "excessive vegetation" problems. This fallacy is at the heart of the flaws of the alternatives analysis as well.

3. The DEIR fails to assess environmentally superior and feasible non-dredging alternatives for Sharp Park wetland and endangered species habitat enhancement and management.

The DEIR uncritically presumes that dredging is the most appropriate (least environmentally damaging) method of providing adequate depth and area of shallow open water marsh-edged wetland habitat suitable for California red-legged frog breeding. It fails to consider feasible environmentally superior alternatives that could achieve the same objectives. The most obvious environmentally superior feasible alternative that was ignored was modification of water level management of the lagoon, which is controlled by artificial drainage of the lagoon by pumps operated by the City. Increased water surface elevations and seasonal fluctuation of lagoon levels, combined with peripheral flood control berms that double as buffers, upland refuge, and basking habitat is a wetland habitat management/enhancement alternative that would eliminate the need for high-cost, high-impact risk engineered dredging alternatives, and would have superior environmental benefits for salinity intrusion and endangered species habitat enhancement. Artificially managing water level fluctuations in the lagoon, emulating natural lagoon hydrology, would maintain a favorable seasonal dynamic balance of shallow open water habitat (submerged aquatic vegetation, principally sago pondweed) and emergent marsh (tule, bulrush, cattail,

spikerush) that is evident in the constructed GGNRA ponds at the toe of Mori Point slopes, where California red-legged frogs and tree frogs are now breeding.

Under existing conditions, there is an unnecessary conflict between lagoon wetland hydrology and upland golf drainage because there is no hydrologic separation between them. Golf fairways extend (by mowing marsh into turf) into the lagoon. Flooding of the lagoon in winter to elevations above the set upper limit of +7.5 ft NA VD that triggers pumping rapidly forms flooded seasonal wetland conditions consisting of shallow open water edged with emergent marsh vegetation - conditions that are evidently attractive for California red-legged frog egg mass deposition. (DEIR, p. 377 describes the long-term winter flooding history) The only reason these flooded wetland margins are not allowed to remain flooded for months in winter (enabling red-legged frog eggs may develop in situ with persistent flooded conditions) is because low-lying golf greens are not hydrologically separated from seasonal lagoon-edge wetlands. Consequently, the entire lagoon is pumped down to drain together both wetlands and topographically continuous golf greens, instead of draining the golf greens alone.

Construction of a low berm or levee bordering the upland side of the lagoon's wetland-upland transition zone would be a feasible alternative way of separating the flood control of golf greens and seasonally flooded lagoon wetlands that support red-legged frog breeding habitat. This would require less fill than raising all flood-prone low-lying fairways that are above the elevation of mown marsh, but would require some pumping on the landward side of the berm. A low flood control berm or levee would allow seasonal flooding along the lagoon edge to be tolerated without rapid pumping to lower the lagoon to drain golf greens. A low flood control levee, with dimensions commensurate with the 2-3 ft depth increase proposed in the dredging alternatives, would allow tolerance of higher chronic winter flooding levels at the lagoon margins, and consequently would allow a significant reduction in the frequency of pump operation. Reduction in the frequency and amplitude of rapid water level fluctuations caused by frequent pumping would therefore reduce the risk of egg mass desiccation and stranding. This alternative would require reversing the current encroachment of golf greens into seasonal wetlands: some golf greens bordering the lagoon that are subject to flooding are in fact routinely mown marsh vegetation, not turgrass (PW A 2011, and section 1 of this letter).

A low flood control berm placed along the truly upland edge of the golf greens would reduce or eliminate the acme flooding conflicts between winter golf management and lagoon management for red-legged frog breeding. A berm would not need to encroach into wetlands at all (as the marsh mowing to expand fairways currently does), and would additionally provide burrowing mammal (ground squirrel, vole, gopher) habitats (estivation and foraging habitat) and emergent thermal refuges (basking sites) for San Francisco Garter Snakes. This may offset "need" for artificial upland fill in wetlands to provide upland refuge habitat. The soils in this infrequently flooded seasonal wetland zone are also relatively lower in sulfide content (less anoxic) and so would be more suited to excavation of shallow ponds (further hydrologically isolating them from lagoon drawdown, allowing more stable pond water levels to further enhance frog breeding habitat quality).

The DEIR failed to consider, even at a screening level, this environmentally superior alternative based on raised winter lagoon levels and low flood control berms bordering golf greens, which is a reconfigured (downsized) golf-adapted version of the comprehensive ecosystem restoration alternative proposed by PWA and others (PWA et al. 2011).

Instead, all DEIR alternatives for Sharp Park that include restoration are exclusively and arbitrarily limited to ones based on dredging potentially toxic sulfidic organic lagoon bed and marsh sediments (and minimize encroachment of golf greens) – even in alternatives that are not "maximum recreation". There is no valid reason given in the DEIR to exclude review of alternatives that allow for flood management to separate well-drained upland golf greens from wetlands within areas of increased lagoon water levels in the range at least +9 to +10ft NA VD. It appears that (tacit) recreational priorities for the status quo of golf fairway boundaries are an overriding arbitrary consideration in the range of feasible alternatives.

In effect, from a perspective of wetland enhancement methods, the DEIR examines only one "restoration" alternative, one that maximizes potential water quality and sediment impact risks for federally listed California red-legged frogs, and minimize or eliminates wetland management (or recapture) of golf greens. The DEIR provides no rational basis for excluding water level management alternatives for lagoon enhancement (no screening-level CEQA explanation of alternatives considered but rejected), and merely adopts the golf-biased, technically flawed proposal of the City's Sharp Park restoration plan (Tetra Tech 2009), which entirely neglected the issue of sediment and water quality impacts associated with sulfidic anoxic lagoon bed sediments, and also provided no sediment testing data or water quality impact analysis of dredging in endangered species habitat.

The omission of water-level management alternatives in the DEIR, and the cursory, superficial assessment of sediment and water quality impacts of dredging Laguna Salada, are particularly problematic because the San Francisco Recreation and Parks Department (SFRPD) hosted a "Sharp Park working group" composed of stakeholder advisors from Golden Gate National Recreation Area (GGNRA, National Parks Service) and San Mateo County, and other park advisors, in which the issues of sulfidic anoxic sediment impacts and water level management alternatives were explicitly discussed in November, 2010.

Furthermore, both these issues were assessed (along with field indicators of existing high sulfide lagoon sediments) in a widely circulated technical report on Laguna Salada restoration alternatives provided to the City, prepared by Philip Williams and Associates (PWA et al. 2011). The DEIR's failure to adequately address water level management that avoids potentially significant impacts of dredging sulfidic sediments is arbitrary, given its knowledge of the potential significance of the impacts and feasibility of alternatives.

4. Summary of CEQA deficiencies and recommendations for remedies.

In summary, the DEIR:

- > fails to screen or analyze less environmentally damaging alternatives to dredging, such as combined water level management and perimeter flood management, to provide equivalent or environmentally superior wetland benefits; [Baye-1-05]

Response AL-11

This comment suggests a non-dredging alternative for the Sharp Park restoration project. This comment also questions whether the potential water surface elevation ranges that are maintained by pump operations could explain the presence of tules and cattails, and whether the proposed dredging operation could compensate for excessive sedimentation or low lagoon water levels by lowering the bed instead of raising the lagoon.

The existing pumphouse operations are part of the baseline conditions at the project site and not a part of the SNRAMP project. Thus, although the existing pumphouse operations inform the project setting and are part of the baseline conditions against which the proposed project's impacts are measured, the operation of the pumphouse itself is not properly considered as part of the proposed project. However, a response is voluntarily provided. Cattails and bulrush grow and spread vigorously in shallow, flooded conditions and can even extend out into deeper waters. Draft EIR pp. 337 and 338 describe the purpose of the restoration efforts with respect to removing accumulated sediments and invasive species, thereby creating more open-water habitat:

“Over the years, cattails and other vegetation have encroached into the historically open water habitat, converting this habitat to freshwater marsh and/or wet meadow and limiting its value as breeding habitat for the California red-legged frog. Removing accumulated sediments and encroaching vegetation would reverse the effects of a trend that would eventually result in the conversion of the remaining open water to vegetated wetland and ultimately conversion of those wetlands to upland. The project proposes to convert vegetated wetland habitat back to open water, resulting in a permanent loss of vegetated wetland. This conversion of wetland to open water habitat would not result in a loss of waters of the US and would be consistent with the historical conditions of Laguna Salada. Freshwater marsh habitat at Laguna Salada is currently dominated by dense stands of cattails (*Typha angustifolia*) and bulrush (*Scirpus* sp.). These species tend to form monostands and prevent the growth of other species. By converting these wetlands to open water, not only will a higher quality habitat be created for protected species, but the biodiversity of native wetland vegetation along the periphery of the open water will increase. This condition would be more consistent with historical conditions of the wetland complex ...”

The proposed activities under the SNRAMP are articulated on Draft EIR pp. 144 to 146. These activities include dredging excess sediments and accumulated organic matter, including stands of encroaching tules. Under this project, the SFRPD would continue to use the pumps to manage water levels in Horse Stable Pond to maintain California red-legged frog habitat. The SNRAMP project does not propose to modify the operations of the existing pumps at Horse Stable Pond.

The existing pumping operations are intended to protect sensitive habitats. To further protect sensitive habitats, in the USFWS's Biological Opinion for the Pumphouse Project, Conservation

Measure 15 (on p. 13 of the Biological Opinion) dictates the specific manner in which the pumps must be operated in order to minimize the potential effects on special-status species.

The commenter also suggests nondredging alternatives for the restoration activities at the Sharp Park wetland complex, including water-level management of the lagoon and construction of a low berm or levee bordering the upland side of the lagoon's wetland-upland transition zone. The creation of a berm and the maintenance of higher water levels at the lagoon would eliminate more areas of the golf course, which would create additional impacts related to historic resources and recreation. Further, the maximum restoration alternative was designed to maximize restoration activities while allowing the golf course to operate, which would not be achieved with the commenters proposed changes to this alternative.

The Sharp Park Conceptual Restoration Alternatives Report¹⁶⁸ (sometimes called the Laguna Salada Restoration Plan in other documents), which is provided as Draft EIR Appendix I, lays out multiple options for the restoration of the Laguna Salada wetland complex. This report addresses alternative methods of operating pumps as well as other measures to control hydrological features, under each of the alternatives evaluated (refer to pp. 2 and 3). The main purpose of managing pump operations is to be able to better control water levels without stranding California red-legged frog egg masses and also to reduce golf course flooding. To reduce the extent to which the pumps must be operated, another option was to raise the ground level of the fairways that traditionally flood. Draft EIR Section VII.F, Alternatives Considered but Rejected, presents yet another alternative that included a model of natural flood control, outdoor recreation, environmental education, and endangered species recovery. This alternative would involve full restoration of the entire Sharp Park property, including the elimination of the golf course.

Kamman Hydrology and Engineering, Inc. (KHE) performed a hydrological evaluation of the Laguna Salada marsh complex and watershed during an entire hydrological cycle in 2008 and 2009. The purpose of the hydrological assessment was to provide a better understanding of the hydrologic processes that affect the distribution of ecological habitats in the wetland system and flooding of the adjacent golf course. Two of the main objectives behind the formulation of the hydrological study were to determine how to regulate water levels to avoid flooding parts of the golf course and to avoid stranding California red-legged frog egg masses. One of the key findings of this report regarding San Francisco garter snake and California red-legged frog habitat and restoration design was that the marsh system is not water limited, as water surface levels are maintained by groundwater even in very dry years. Increases in precipitation and runoff to the system only increase the amount of water that must be pumped out of the system, indicating that the problem is an excess of water, rather than artificially low water levels. Additionally, the report found that

¹⁶⁸ Tetra Tech, Swaim Biological, and Nickels Golf Group, *Sharp Park Conceptual Restoration Alternatives Report*, November 2009.

increasing the system's storage capacity through extensive dredging would not result in diminished water levels or compromised water quality (including salinity levels). Therefore, a nondredging alternative did not present any benefits.¹⁶⁹

On December 17, 2009, the San Francisco Recreation and Parks Commission passed resolution 0912-018, which recommends proceeding with the Laguna Salada restoration while maintaining the 18-hole golf course (also known as Alternative A18 in the Sharp Park Conceptual Restoration Alternatives Report). Alternative A18 requires raising the level of fairways that flood, which also reduces the extent to which the pumps must be operated to prevent flooding of the fairways. Many of the project elements that originate from Alternative A18 in the Sharp Park Restoration Report have been incorporated into the proposed SNRAMP and are being analyzed in the Draft EIR.

According to CEQA Guidelines Section 15126.6(a), "an EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation." CEQA Guidelines Section 15126.6(c) goes on to state that "[t]he range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects."

For the SNRAMP project, significant and unavoidable effects (even with the implementation of all identified mitigation measures) relate to cultural resources and air quality on a project-specific basis and cultural resources, recreation, biological resources, and air quality on a cumulative basis. All other impacts are less than significant or less than significant with implementation of the mitigation measures identified in the Draft EIR. As reflected on Draft EIR p. 82, the proposed project's basic objectives are as follows:

- To identify issues and impacts adversely affecting ecosystem functions and biological diversity;
- To identify, prioritize, and implement restoration and management actions designed to promote the functioning of San Francisco's native¹⁷⁰ ecosystem, including the maintenance and enhancement of native biodiversity;
- To identify and prioritize monitoring of natural resources to support an adaptive management¹⁷¹ approach;

¹⁶⁹ Kamman Hydrology & Engineering. *Report for the Hydrologic Assessment and Ecological Enhancement Feasibility Study: Laguna Salada Wetland System*, Pacifica, California, March 30, 2009.

¹⁷⁰ Native – Grown, produced, or originating from a particular geographic area.

¹⁷¹ Adaptive management – A flexible, learning-based approach to managing complex ecosystems.

- To provide guidelines for passive recreation¹⁷² compatible with San Francisco's natural resources;
- To provide guidelines for education, research, and stewardship programs; and
- To restore the Laguna Salada wetland complex for the benefit of special status species.

The alternatives presented in the Draft EIR, as opposed to those presented in the Sharp Park Conceptual Restoration Alternatives Report, were developed to avoid or substantially lessen one or more of the significant effects, while feasibly accomplishing most of the basic project objectives. The alternatives include a maximum restoration alternative, a maximum recreation alternative, and a maintenance alternative.

As previously mentioned, the commenter suggests an alternative to dredging at Sharp Park (i.e., water level management or construction of a low berm or levee bordering the upland side of the lagoon's wetland-upland transition zone). The Draft EIR concludes that there are no significant and unavoidable effects associated with dredging at Sharp Park. As stated on Draft EIR p. 371, dredging would be regulated by the SWRCB and SFBRWQCB through Section 401 of the Clean Water Act. The intent of this regulation is to prevent any degradation of water quality that would impair beneficial uses of the receiving waterbodies. Draft EIR p. 371 goes on to say that, as part of the Laguna Salada restoration project, Laguna Salada and Horse Stable Pond would be drained before the dredging and deepening begin. Dredging would be conducted during the dry season from April 15 through October 15, which is also the non-breeding season for sensitive species, when inflow to Laguna Salada is lowest. As a result, the SFRPD does not propose to discharge water from Laguna Salada or Horse Stable Pond to the Pacific Ocean during restoration. Draft EIR p. 372 concludes that impacts on water quality from disturbance of sediment during dredging would be less than significant by avoiding discharges during construction or ensuring that sediment-laden water is discharged in compliance with the permits issued for the project and by monitoring water quality to demonstrate that it is suitable for aquatic species (M-BI-12b). As further explained in Response BI-7, RTC p. 4-365, in order to ensure potential impacts are mitigated to a less-than-significant level, in the unlikely event that anoxic conditions materialize (resulting in acid soil sulfate conditions), Draft EIR Mitigation Measure M-BI-6a, Protection of Protected Species during Implementation of the Sharp Park Restoration Project, p. 326, has been revised to include a sediment core sampling and monitoring process to address the potential presence of anoxic conditions. In addition, Mitigation Measure M-BI-6a was revised to be consistent with Pumphouse FMND Mitigation Measure M-BIO-2b, which was subject to previous public review and comment. The full text of Mitigation measure M-BI-6a, as revised, is provided in Response BI-7, RTC. p. 4-365, and RTC Chapter 5, Draft EIR Revisions, RTC p. 5-1.

¹⁷² Passive recreation – Recreation that occurs in a natural setting and that requires minimal site development or facilities. Under passive recreation, the importance of the environment or setting for the activities is greater than in developed or active recreation settings.

Finally, with respect to an analysis of sedimentation, a sediment yield analysis¹⁷³ was prepared to: (1) provide an estimate of the volume of sediment that moves through the watershed above Laguna Salada under various conditions; (2) provide a baseline estimate for designing sediment catch basins; and (3) prepare a qualitative estimate of the degree to which sediment from the watershed affects bottom elevations in the lagoon. Annual sediment delivery rates (or sediment yields) were estimated in order to support design of sediment detention and removal facilities. The approach to the sediment yield analysis includes a first-cut level of analysis based on the Revised Universal Soil Loss methodology to estimate the long-term average annual soil loss from the tributary areas. Additionally, the Modified Universal Soil Loss Equation was used to predict soil erosion from the 2-, 5-, 10-, 25-, 50-, and 100-year storm events. The study concluded that sediment deposition has occurred since 1931, and the rate of sediment yield is calculated to be 1.02 tons/acre/year, which is within the range of the other sediment yield rates for other studies in nearby areas.

In summary, the nondredging alternatives did not provide any benefits for the following reasons: (1) a nondredging alternative would eliminate more areas of the golf course, which would create additional impacts related to historic resources and recreation; (2) increasing the system's storage capacity through dredging would not result in diminished water levels or compromised water quality (including salinity) levels, providing no benefits associated with a nondredging alternative; (3) there are no significant hydrologic, water quality, or biological resource impacts (or any other impacts, for that matter) associated with dredging that would be offset by a nondredging alternative; and (4) the SWRCB and SFBRWQCB would regulate the dredging activities pursuant to Section 401 of the Clean Water Act to further ensure that all activities are undertaken in accordance with the requirements of the issued permits and prevailing laws. The proposed project was determined to be the best option to restore the Laguna Salada wetland complex for the benefit of special-status species, which is one of the six basic project objectives. Further, and as previously mentioned, the alternatives analysis presented in the Draft EIR provides a wide range of alternatives to satisfy the requirements of CEQA.

¹⁷³ Tetra Tech, Inc., *Draft Sediment Yield Report, Laguna Salada Wetland Restoration and Habitat Recovery Project*, September 2012.

Comment AL-12 Choosing feasible alternatives over the proposed project
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The response to Comment AL-12 addresses all or part of the following individual comment:

PH-Rotter-P-02

- Second thing about that is that this proposal is a violation of CEQA. CEQA says that public agencies should not approve projects proposed if there are feasible alternatives or feasible mitigation measures available. There are – from what they propose is the maintenance intervention of into the environment.

There are alternatives, and it is says so in this EIR. [PH-Rotter-P-02]

Response AL-12

This comment indicates that public agencies should not approve projects if there are feasible alternatives or mitigation measures.

This comment does not raise any specific environmental issues about the adequacy or accuracy of the Draft EIR's coverage of environmental impacts that require a response in this RTC document under CEQA Guidelines Section 15088. However, a response is provided to clarify the CEQA requirements for approving a project with significant environmental impacts. CEQA Section 21081 states that a public agency shall not approve a project if there are feasible alternatives or mitigation measures available unless: (1) The lead agency makes specific findings regarding each significant environmental effect stating that changes have been incorporated into the project to mitigate or avoid a significant effect, those changes are within the jurisdiction of another public agency and can be or should be adopted by that agency, or specific economic, legal, social, technological, or other considerations make infeasible mitigation measures or alternatives identified in the EIR; and (2) with respect to mitigation measures or alternatives found to be infeasible, a specific finding be made that other benefits of the project outweigh the significant effects on the environment. Therefore, it is possible and common, for public agencies to approve a project that has significant environmental impacts if the benefits of the proposed project outweigh those impacts.

Comment AL-13 Propose alternative of reducing, redirecting, or shutting down the Natural Areas Program
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The response to Comment AL-13 addresses all or part of the following individual comments:

Kessler-1-14

Kessler-2-14

Pittin-1-04

Rotter-P-1-03

Valente-1-11

Valente-1-13

- However, I and many others would like to see the NAP program actually cut back extensively. [Kessler-1-14] [Kessler-2-14]
- One alternative for San Francisco not proposed is shutting NAP down, or redirecting NAP in a direction of co-habitation, preserving 'native' plants in an evolving environment. [Rotter-P-1-03]

- The EIR, in its focus on expansion, also does not reflect the possibility of reducing the NAP program so that the San Franciscan population - people and wildlife - are no longer subject to the effects of NAP chemical warfare.

I ask that the EIR be redone to reflect the realities of recreation and alternative uses of our shared open spaces, and to reduce the toxicity of our already all-too-polluted urban environment. A new, science-based EIR should be prepared for consideration. [Pittin-1-04]

- At best, the NAP should devote 5% of the park properties to Natural Areas; a figure proportionate to the population these areas bring pleasure to. That limited development should be put on hold until SFRPD can put its house in order; they must complete their audits, and set and reach standards for all existing park facilities before NAP is even brought up again for implementation in no more than 5% of the SFRPD's undeveloped or underdeveloped park properties. [Valente-1-11]
- Is There A Preferred Alternative? Yes, but this EIR does not include it. This EIR is designed only to promote NAP which for the reasons outlined above is unconscionable.

Our Preferred Alternative would set aside 50 acres scattered about the City where conversion to natural areas is not overly destructive. This would:

- > minimize loss of recreational facilities in our crowded urban environment
- > recognize preferences of native plant advocates
- > still provide areas to protect all species endangered or otherwise
- > provide an educational forum for native plant advocates
- > save lots of taxpayer money
- > minimally impact air quality by saving approximately 100,000 trees
- > preserve the landscape the way the vast majority of San Franciscans like it [Valente-1-13]

Response AL-13

These comments suggest eliminating or significantly reducing the NAP as an alternative to the proposed project. A commenter suggests an alternative that would provide 50 acres scattered throughout the city where conversion to natural areas is not overly destructive and identifies benefits of this alternative.

As more fully discussed in Response G-2, RTC p. 4-15, the Recreation and Open Space Element (ROSE) of the City's General Plan (updated in April 2014) requires the City to protect and enhance the biodiversity, habitat value, and ecological integrity of open spaces and encourage sustainable practices in the design and management of the City's open space system (Objective 4). In addition, the San Francisco Department of the Environment's Biodiversity Program also supports the protection and maintenance of biodiversity within the Natural Areas. The SFRPD's NAP supports the goals of the ROSE and the Biodiversity Program, with a mission to preserve, restore, and enhance remnant Natural Areas, and to develop and support community-based site stewardship of

these areas. The SNRAMP is a management plan to protect and enhance those Natural Areas. Accordingly, as listed on Draft EIR p. 82, the CEQA project objectives are:

1. To identify issues and impacts adversely affecting ecosystem functions and biological diversity;
2. To identify, prioritize, and implement restoration and management actions designed to promote the functioning of San Francisco's native ecosystem, including maintenance and enhancement of native biodiversity;
3. To identify and prioritize monitoring of natural resources to support an adaptive management approach;
4. To provide guidelines for passive recreation compatible with San Francisco's natural resources;
5. To provide guidelines for education, research and stewardship programs; and
6. To Restore the Laguna Salada wetland complex for the benefit of special status species.

In compliance with CEQA Guidelines Section 105126.6 (f), "[o]f those alternatives, the EIR need examine in detail only those that the Lead Agency determines could feasibly attain most of the project objectives." An alternative as suggested by the commenter to eliminate the NAP altogether or to substantially reduce the size of the Natural Areas would not meet the primary CEQA project objectives listed above, and, therefore, need not be analyzed in the EIR.

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RTC CHAPTER 5 Draft EIR Revisions

5.A CHANGES IN RESPONSE TO COMMENTS

The following revisions or clarifications to the text of the Draft EIR are made in response to public comments received on the Draft EIR or as initiated by City staff. Deleted text is shown in ~~striketrough~~, and new text is double underlined. These changes are organized in the order of the Draft EIR table of contents, and all text changes are provided by Draft EIR page number.

While revisions to the Draft EIR text have been proposed, none of the revisions change any of the conclusions in the Draft EIR and do not constitute significant new information, which is defined in CEQA Guidelines Section 15088.5 as a new significant environmental impact; a substantial increase in the severity of an environmental impact; a feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project’s proponents decline to adopt it; or the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. (*Mountain Lion Coalition v. Fish and Game Com.* (1989) 214 Cal.App.3d 1043) Thus, recirculation pursuant to CEQA (California PRC Section 21092.1) and the CEQA Guidelines (14 CCR Section 15088.5) is not required.

5.A.1 Glossary

As discussed in Response BI-27, RTC p. 4-431, Draft EIR pp. ix to xiii has been changed, as follows:

Basal Area—A measure, typically in square feet per acre, of the area covered by trees at breast height, or 4½ feet above the ground ~~urban forest~~. Basal area is a standard form of measurement that is used as an index of tree production.

...

Forest—A dense growth of trees and underbrush covering a large tract.

...

Invasive species—A species that is nonnative (or alien) to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.

...

Recreation—Activity done for enjoyment when one is not working. Within the Natural Areas, typical recreational activities include, but are not necessarily limited to, walking, hiking, running, nature watching, dog walking, picnicking, other passive recreational activities, and volunteering.

Riparian—Land next to a natural watercourse, such as a river or stream. Riparian areas support vegetation that provides important wildlife habitat, as well as important fish habitat when it overhangs the bank. The SNRAMP goes on to define riparian as “relating to or living or located on the bank of a natural watercourse (as a river) or sometimes of a lake or a tidewater.”

...

~~Scrub—Low trees or shrubs collectively growing or stunted vegetation on poor soil or in semiarid regions, which sometimes form impenetrable masses.~~

...

Urban forest—A significant stand of mostly nonindigenous trees.

5.A.2 Chapter I: Summary

As discussed in Response G-10, RTC p. 4-50, Response AL-4, RTC p. 4-566, and Response AL-10, RTC p. 4-595, Draft EIR p. 2, line 8, has been changed as follows:

The ~~Maximum Restoration-Maintenance~~ Alternative is the Environmentally Superior Alternative.

As discussed in Response CP-5, RTC p. 4-259, Draft EIR p. 11, Mitigation Measure M-CP-1, has been changed as follows:

M-CP-1: Consultation with the San Francisco Planning Department

The SFRPD would coordinate with the San Francisco Planning Department's Historic Preservation Specialists-Planners and would submit plans before constructing stabilizing and erosion control measures that require installation of structures, such as gabions, near ~~any~~ potentially eligible resources. Should it be determined that a Historic Resource Evaluation is required, that evaluation shall be completed by a qualified professional landscape architectural historian. The Planning Department would assist in determining if any proposed construction or other activities would impact identified historic resources under CEQA on a site-by-site basis; if such impacts may occur, the project would be required to be redesigned to avoid significant impacts to historic architectural resources. The Planning Department would also assess potential impacts on any historic landscapes that are present.

As discussed in Response CP-9, RTC p. 4-270, the text on Draft EIR p. 11 has been changed as follows:

Impact CP-2. Invasive tree and vegetation removal and planting activities, as part of programmatic projects, would not result in a substantial adverse change in the significance of cultural historic landscapes or urban forests

As discussed in Response CP-5, RTC p. 4-259, Draft EIR p. 13, Mitigation Measure M-CP-7, Documentation of the Sharp Park Golf Course, on p. 222, has been changed as follows:

M-CP-7: Documentation of the Sharp Park Golf Course

The SFRPD ~~would document, or~~ would retain a consultant with expertise in historic golf course renovation and with specific expertise, if possible, in golf courses designed by Alister MacKenzie to document, and preserve the historic character-defining features of the Sharp Park Golf Course before wetland restoration activities take place. The National Park Service has published guidance for preserving cultural landscapes in Preservation Brief 36: Protecting Cultural Landscapes, Planning, Treatment, and Management of Historic Landscapes and in the more complete Secretary of the Interior's Standards for the Treatment of Historic Properties Guidelines for the Treatment of Cultural Landscapes. The appropriate level of documentation would be selected by a qualified professional landscape architectural historian who meets the standards for history, architectural history, or architecture (as appropriate) set forth by the Secretary of the Interior's Professional Qualification Standards, (36 CFR, Part 61). The documentation would consist of the following:

- Full sets of measured drawings depicting existing or historic conditions of the Sharp Park Golf Course;
- Digital photographs of the Sharp Park Golf Course;
- A written history and description of the Sharp Park Golf Course and its alterations.

The professional landscape architectural historian would prepare the documentation and submit it for review and approval by a San Francisco Planning Department Preservation Specialist. The documentation would be disseminated to the San Francisco Library History Room and the SFRPD Headquarters.

As discussed in Response CP-4, RTC p. 4-255, Draft EIR p. 28, M-RE-6, Restoration of the Sharp Park Golf Course to 18 Playable Holes, has been changed as follows:

M-RE-6: Restoration of the Sharp Park Golf Course to 18 Playable Holes

The SFRPD would coordinate with a golf course consultant with expertise in historic golf course renovation and with specific expertise, if possible, in golf courses designed by Alister MacKenzie, and would to restore the playability of the Sharp Park Golf Course, which while documenting and preserving the historic character-defining features of the course and avoiding impacts to sensitive biological resources; this would involve replacing Hole 12 either on the west (Option 1) or east (Option 2) side of Highway 1. Replacing the hole on the west side of Highway 1 may also require moving an additional hole west of the highway to retain playability and flow of the course, thereby increasing the number of holes west of the highway to 15 and decreasing to three the number of holes to the east. Creating a new hole east of Highway 1 would decrease the number of holes west of the highway to 13 and increase to five the number of holes to the east. The determination of where the replacement hole is constructed and whether additional holes need to be moved would may require additional environmental review.

As discussed in Response BI-1, RTC p. 4-351, Draft EIR p. 30, Section 1a of Mitigation Measure M-BI-1a, Protection of Protected Species and Riparian and Wetland Habitat,, has been changed as follows:

For protected species and the fully protected California clapper rail, a qualified SFRPD biologist¹⁷⁴ shall survey for suitable habitat within the project area before the project begins, according to USFWS and CDFW protocol for the protected species having the potential to occur. If no protocol exists, surveys shall be conducted according to generally accepted survey methods. If individuals were found or if it is determined that the potential exists for protected species to be present, the SFRPD shall redesign the proposed project to avoid impacts on protected species. Avoidance/minimization measures shall include conducting project activities during periods of the species lifecycle when the species would not be affected or may be minimally affected by project activities. SFRPD shall not perform any activities that would result in take (as defined by California laws for fully protected species) of California clapper rails. If it is infeasible to avoid disturbance to other protected species (besides the California clapper rail), the SFRPD will contact the USFWS or CDFW and undertake appropriate consultation according to the CESA or ESA (unless an existing Biological Opinion is already in place and the proposed activities fall under the actions of

¹⁷⁴ A SFRPD biologist knowledgeable about protected species occurring within the area proposed for disturbance. If no SFRPD biologists are familiar with the protected species occurring in the area proposed for disturbance, the SFRPD would be required to obtain a qualified biologist to conduct protected species surveys.

that Biological Opinion, as may be the case for impacts to the mission blue butterfly at Twin Peaks). Any additional requirements agreed to during consultation with the USFWS and CDFW, or other regulatory agencies, to protect the species would be implemented, including restoration and compensation, where required.

As discussed in Response BI-29, RTC p. 4-435, Draft EIR p. 40, the first subbullet has been changed as follows:

- **Mission Blue Butterfly:** This species occurs at Twin Peaks and Sharp Park. The following measures shall apply to these Natural Areas:
 - > To avoid impacts to this species, SFRPD shall adhere to the long-term management and monitoring guidelines as described in the Recovery Action Plan for the Mission Blue Butterfly at Twin Peaks Natural Area and the corresponding Biological Opinion ~~and as that has been issued by~~ agreed to with the US Fish and Wildlife Service. These guidelines include conducting vegetation removal by manual, mechanical, and chemical treatments that would be applied consistent with the SFRPD Integrated Pest Management program, such as hand pulling, cutting and grubbing. To avoid impacts from trampling of host plants by recreational users, the SFRPD shall continue to conduct regular maintenance on the existing trail network including trimming trailside vegetation and replacing trail base materials.

As discussed in Response BI-7, RTC p. 4-365, Draft EIR p. 40, Mitigation Measure M-BI-6a, Protection of Protected Species during Implementation of the Sharp Park Restoration Project, has been changed as follows:

M-BI-6a: Protection of Protected Species during Implementation of the Sharp Park Restoration Project

The SFRPD shall implement the following, subject to modification during the required regulatory approval processes:

Avoidance Measures:

- The number of access routes, the size of staging areas, and the total area of activity would be the minimum necessary to achieve the project goals and to the extent feasible access routes shall be located in upland areas;
- Vehicle and equipment operators would use existing access roads and would remain outside of wetlands and riparian areas that are not integral to the restoration project;
- The construction documents for the Sharp Park restoration project would identify construction staging areas, access corridors, and work zones that are least impactful to biological resources, as well as golf play and operations. Avoidance of wetlands and other biological resource areas, however, would take precedence over avoidance of golf play areas, such that golf play and operations would be impacted rather than biological resources;
- After surveying the construction site for special-status species in accordance with this mitigation measure, silt fencing or exclusion fencing would be placed around the project and staging areas to reduce the potential for animals to enter the construction site. Fencing will be monitored throughout construction to ensure no San Francisco garter snakes, California red-legged frogs, or western pond turtles enter the area; fencing will meet CDFG specifications so as to avoid impacts to species potentially getting trapped in the fence.

- No restoration and construction shall occur between November 15 and April 15, the breeding season for California red-legged frog and the season when San Francisco garter snakes are inactive in their winter burrows, although shrubs and willow posts may be planted by hand after the first rains, and weeds may be removed within 15 feet of aquatic areas during these times;
- Before moving any vehicles that remain stationary for longer than 30 minutes, the biological monitor would inspect those vehicles to ensure that no animals had crawled beneath them for cover;
- During project activities, all trash that could attract nonnative predators would be properly contained, removed from the work site, and disposed of regularly. Following project completion, all trash and construction debris would be removed from work areas.

Pre-Construction and Construction Activities:

- Prior to commencement of any on-site work related to the proposed removal of sediment and emergent vegetation in the Laguna Salada wetland complex, which includes the Horse Stable Pond and the connecting channel and culverts that link Horse Stable Pond and Laguna Salada, additional sediment core sampling tests shall be conducted, as necessary, in the manner specified in this mitigation measure to determine whether there are elevated concentrations of sulfides or other soil characteristics that would render the soils unsuitable for supporting the desired vegetation.

The results of the sediment core sampling tests shall be submitted to the USFWS and CDFW for review prior to commencement of any on-site remediation work or sediment/vegetation removal work at Horse Stable Pond or the connecting channel and culverts.

If remediation measures are required based on the results of the sediment core sampling tests, the SFRPD shall submit a remediation and monitoring plan (prepared by a qualified biological/hydrological consultant) to all applicable resource agencies for review prior to implementation of the remediation measures. Alternatively, the soils could be placed in a nonsensitive location. Copies of all correspondence with the resource agencies shall be submitted to the ERO. The sediment core sampling tests shall include the following elements:

1. Work Plan

A Work Plan for sediment core sampling tests shall be prepared by a qualified SFRPD biological/hydrological consultant and submitted to the USFWS and CDFW for review. The Work Plan shall describe, at a minimum, compliance with Tasks 2 through 5 of this part of the mitigation measure, as well as the "During and Post-Construction pH Monitoring" requirement (see following section). Copies of all correspondence with the responsible agencies shall be submitted to the ERO.

2. Sampling of Sediment Cores

The locations of any additional sampling shall be determined pursuant to the work plan developed in accordance with Task 1, above. Sample sediment cores shall include the soils between the current surface sediment level and approximately two to three feet below the current surface. This depth shall be at least one foot below the proposed depth of the future sediment-water interface.

3. Analysis of Sediment Cores and Estimation of the Potential for Formation of Acid Sulfate Soils

The sediment cores shall be analyzed every five centimeters over the first 20 centimeters of core depth and then every 10 centimeters, or as appropriate based on field conditions, for the remainder of the core length for the following components: Total Organic Carbon (TOC), carbonate/bicarbonate, sulfate, sulfide, sulfites, pH, calcium, sodium, iron, aluminum, chloride, conductivity, redox potential, refractory organics, organic nitrogen, total phosphorus, ammonia, nitrate+nitrite nitrogen, soluble reactive phosphorus, organic phosphorus, loosely-sorbed phosphorus, iron-phosphorus, iron-phosphorus, aluminum-phosphorus, and calcium-phosphorus. Sediment core chemistry shall be analyzed to assess the potential reduction of sulfate to form hydrogen sulfate, iron sulfides, and reduction buffering capacity relative to acid-neutralizing capacity.

In addition, sediment oxygen demand (SOD) in the sediment cores shall be measured. Results shall be compared to the total oxidizable organic material, which would be estimated from the difference of TOC and refractory organic carbon (labile carbon). These results shall be used in the analysis of potential for formation of anoxic conditions within the Laguna Salada Wetlands Complex.

Sediment cores shall be analyzed based on Toxicity Reference Values (TRVs) from the USEPA and Screening Quick Reference Tables (SQuiRT) from the National Oceanic Atmospheric Administration.¹⁷⁵ A draft summary of potential toxics shall be provided to the USFW, CDFW, and ERO for review and, if needed, revision will be made to the toxicity ranges appropriate for use in analyzing the sediment cores.

The potential for formation of acid sulfate soils and anoxic conditions in the water column shall be estimated based on this analysis and in coordination with the USFWS and CDFW. If this analysis determines that acid sulfate soils could be present in this location, the SFRPD shall perform a toxic pathway analysis to determine the appropriate remediation measures. The analysis results and determination shall be submitted to the USFWS, CDFW, and ERO.

4. Toxics Pathway Analysis

Should the potential for acid sulfate soils and anoxic conditions be present, a toxics pathway analysis shall be conducted for potential risks and toxicities to species that may be affected by localized increases in acidity, hypoxia, or dissolved metals concentration. During this Task, toxicity standards shall be established in coordination with the USFWS, CDFW, and ERO based on the results of Tasks 2 and 3 above, site-specific hydrologic conditions including water exchange and dissolved oxygen levels, the species that are known to be present, and literature review. The results of this task shall be submitted to the USFWS and CDFW and any applicable responsible agencies for review

¹⁷⁵ NOAA, Office of Response and Restoration. SQuiRT Cards. This document is available online at: <http://response.restoration.noaa.gov/cpr/sediment/squirt/squirt.html>, accessed on July 17, 2013.

and comment. Copies of all correspondence with the responsible agencies shall be submitted to the ERO.

Should the results of the sediment core tests reveal that there has been an appreciable increase in the amount of nitrogen and related compounds in the sediment cores, any necessary measures to remediate such compounds shall be undertaken in accordance with Task 5, below. The SFRPD shall hire a qualified biological/hydrological consultant to prepare a remediation and monitoring plan which shall be submitted to the USFWS and CDFW for review and approval. Copies of all correspondence with the resource agencies shall be submitted to the ERO for review.

5. Remediation

If results of the sediment core chemistry analysis reveal the potential for reduction of sulfate to form hydrogen sulfate, iron sulfides, and its reduction in buffering capacity relative to acid-neutralizing capacity, or if the toxics pathway analysis indicates that their presence could potentially result in substantial stress to special-status species, the SFRPD shall implement remediation measures.

Remediation measures could include, but are not limited to:

- a. Addition of lime to neutralize any acid that exists or which may form during the sediment removal process;
- b. Injection of sodium nitrate to oxidize the sediments, thereby satisfying the sediment oxygen demand; or
- c. Use of suction hydraulic sediment removal that reduces re-suspension of any form of sediments.

Depending on the severity of the condition (e.g., hypoxia), the remediation measure selected for implementation would be the least intensive beginning with Item a, when signs of hypoxia are present, to the most intensive with Item c, when hypoxia is persistent and/or widespread. The SFRPD shall select the remediation measure in consultation with the USFWS and CDFW. The remediation measure shall be selected based on immediate threats to species and sensitive life stages present during occurrence of the hypoxic condition.

- A worker education program shall be implemented to familiarize workers, including all vehicle operators, of the importance of avoidance of harm to special-status species and the proper protocol should a protected species be encountered. The training shall include a discussion of the importance of maintaining speed limits and respecting exclusion zones. The SFRPD and its construction contractor shall confirm that all workers have been trained appropriately.
- Two weeks prior to the commencement of work activities and immediately prior to commencement of work, a qualified biologist will survey aquatic habitat that is suitable for the California red-legged frog, San Francisco garter snake, and western pond turtle that would be affected by the project. If individuals in any life stages of these species are found, the biologist will contact the USFWS and/or CDFG to determine whether relocating any life stages is appropriate. Collection of California red-legged frogs, San Francisco garter snakes, and western pond turtles would be done with hand nets, and shall be relocated to areas of appropriate habitat;

- Upland vegetation in all construction areas will be progressively cleared by hand equipment to a height of 4 inches and checked for the presence of protected species prior to disturbance and prior to construction equipment or vehicles entering the sites. Once vegetation is cleared, an additional pre-activity survey for the San Francisco garter snake, western pond turtles, and California red-legged frogs will be conducted in the impact area.
- Prior to construction near wetlands or ponds, all rodent burrows in the construction area will be hand excavated until the burrows terminate or to a maximum depth of 30 centimeters in areas where soil or fill will be removed or placed.

Biological Monitor:

- A biological monitor familiar with the identification and life history of California red-legged frog, San Francisco garter snake, western pond turtle, and other potentially present protected species, and with the appropriate agency authorization, shall be designated to periodically inspect onsite compliance with all mitigation measures.
- The biological monitor shall perform a daily survey of the entire project area during construction activities. During these surveys, the monitor shall inspect the exclusion fencing for individuals trapped within the fence and determine the need for fence repair. Throughout the duration of the project, the monitor shall continue to perform daily fence surveys and compliance reviews at the project site. The monitor shall be designated prior to project implementation and shall have at least one specialty environmental monitor on call, with a valid 10(a)(1)(A) permit to handle listed species. The specialty monitor shall direct all personnel in regards to interactions with protected species, perform authorized species relocations, and supervise all reporting on such species.
- Bullfrog monitoring will occur and egg masses detected shall be removed.

During and Post Construction pH Monitoring:

During sediment and vegetation removal in the Laguna Salada Wetland Complex, pH levels immediately above the sediment shall be monitored by the SFRPD to ensure that implementation of the proposed project would not adversely affect special-status species.¹⁷⁶ To ensure that residual acid sulfates in the water column would not adversely impact special-status species, pH levels in Horse Stable Pond and the connecting channel shall be monitored by the SFRPD for a period of six weeks after the proposed sediment and vegetation removal is completed. A remediation measure, such as addition of lime or injection of sodium nitrate, shall be implemented if the monitoring warrants such a remediation measure to protect special-status species based on the toxicity standards that are established in accordance with Task 4 above.¹⁷⁷

¹⁷⁶ pH is an indicator of anoxic conditions at the sediment-surface water interface. Under anoxic conditions, hydrogen ion availability increases and binds with sulfides mobilized from sediments. Rates of transformation of sulfur are mediated by microorganisms in both the sediments and surface water. Suspension of hydrogen sulfide (H₂S) in the water column is oxidized in surface water to form sulfuric acid (H₂SO₄).

¹⁷⁷ David Munro, Tetra Tech, Inc., Email to Stacy Bradley, SFRPD, Sharp Park Appeal: M-BI-2b – Post Construction Monitoring, January 7, 2014.

5.A.3 Chapter III: Project Description

As discussed in Response PD-13, RTC p. 4-175, beginning with the first paragraph on Draft EIR p. 77, the text has been changed as follows:

While San Francisco is by and large a densely developed urban area, fragments of unique plant and animal habitats, known as Significant Natural Resource Areas (Natural Areas), have been preserved within the parks of San Francisco and Pacifica that are managed by the SFRPD. In the late 1990s, the SFRPD developed a Natural Areas Program to protect and manage these Natural Areas for the natural and human values they provide. The Natural Areas Program mission is to preserve, restore, and enhance the remnant Natural Areas and to promote environmental stewardship of these areas. On January 19, 1995, the San Francisco Recreation and Park Commission approved the first Significant Natural Resource Areas Management Plan.

Since 1995, the SFRPD has embarked on an almost 10-year process that involved SFRPD, meetings with over 3,000 members of the public, task forces, advisory groups, independent technical advisers, consultants, and decision-making bodies to study, consider, and ultimately propose the 2006 Significant Natural Resource Areas Management Plan.

In June 2005, when the Draft SNRAMP was released for public review, three well-attended public workshops were held throughout the city. Outreach included sending fliers to neighborhood groups and residents within 300 feet of all Natural Areas, the Mayor's Office of Neighborhood Groups, SFRPD's list of neighborhood groups, and other interested parties. Announcements were also posted at all Natural Area sites. An online survey was available for individuals and members of the public that were unable to attend in person. Feedback was received from approximately 2,700 members of the public. Further, several task forces, committees, and working groups were convened as part of this process, including (1) the Natural Areas Program Citizen Advisory Committee, an ad hoc group that made recommendations on how to revise the plan, (2) a Science Round Table group that reviewed the Alternatives Report for Sharp Park, and (3) the Sharp Park Working Group. The Sharp Park Working Group, which was convened by SFRPD and facilitated by an independent party, consisted of land managers with an interest in the property, including San Mateo County, the City of Pacifica, the Golden Gate National Recreation Area, and the SFRPD. In addition, revisions to the Sharp Park Restoration Plan were also specifically made in response to input from scientists and regulatory agencies.

Three independent scientific reviews of the 2005 Draft SNRAMP were also conducted in August 2005. The goal of this independent review was to assess the scientific basis for the plan and evaluate the goals, issues, and recommendations. Additionally, the reviewers were asked to determine if the 2005 Draft SNRAMP was feasible to implement and if implementation of the proposed management activities would result in the desired outcome. The first review was conducted by Dr. Lynn Huntsinger and James W. Bartolome,¹⁷⁸ who provided a detailed report to the SFRPD (Huntsinger and Bartolome 2005). This review reached the following overall conclusions:

- The 2005 Draft SNRAMP was based on sound science and was a reasonable compromise between ideals, practicality, and competing uses.

¹⁷⁸ Review: Significant Natural Resource Areas Management Plan, Lynn Huntsinger and James W. Bartolome, Submitted to the San Francisco Recreation and Parks Department, August 2005.

- The management goals (conservation, restoration, education, stewardship, recreation, and monitoring) are consistently addressed throughout the Plan.
- The proposed actions and monitoring seemed generally feasible.

The review suggested revisions to the recommendations dealing with management of the urban forest understory, grasslands (see GR-3 in Section 5), and butterfly host plants (see GR-10). The general recommendations referenced by these comments have been revised and updated. The review also suggested minor changes to the Monitoring protocols (Section 7), which were implemented.

A second review was conducted by Roy A. Woodward, PhD. Dr. Woodward made comments on and suggested edits to the text, particularly as it related to the Monitoring Plan and Protocols. The 2005 Draft SNRAMP was revised per these edits as appropriate.¹⁷⁹

A third review was conducted by Peggy Fiedler, PhD. Dr. Fiedler concluded that the 2005 Draft SNRAMP in general succeeded in its goals and “strikes a balance between natural resource protection and the needs of citizens in a highly urbanized, densely populated, highly ethnically diverse, overall well-educated area.”¹⁸⁰

Over the course of several years, Ultimately, the SFRPD updated and expanded the level of detail in the 1995 plan, as well as incorporated the comments from the above scientific reviews on the 2005 Draft SNRAMP, ultimately resulting in a new the 2006 Final Draft Significant Natural Resource Areas Management Plan (SNRAMP, SFRPD 2006), with a final draft plan. The San Francisco Recreation and Park Commission approved the final draft SNRAMP plan for CEQA evaluation in August 2006. In April 2009, the Board of Supervisors introduced legislation that required the SFRPD to develop and plan for restoring Sharp Park for the California red-legged frog and the San Francisco garter snake; in response to this, the SFRPD began to develop the Sharp Park Conceptual Restoration Alternative Report, which was completed in September 2009.

In December 2009, the Recreation & Park Commission agreed to proceed with the Laguna Salada Restoration while preserving the 18-hole golf course at Sharp Park. In August 2011, the SNRAMP Draft EIR was released for public comment and in September 2011, a Historic Preservation Commission Hearing was held (with split votes as to whether Sharp Park is a historic resource) and in October 2011, the Planning Commission Hearing on the Draft EIR was held.

This SNRAMP contains detailed information on the biology, geology, and trails within 32 Natural Areas, 31 in San Francisco and one (Sharp Park) in Pacifica. The SNRAMP is intended to guide natural resource protection, habitat restoration, trail and access improvements, other capital projects, and maintenance activities over the next 20 years. The proposed project is the SFRPD’s implementation of the SNRAMP.

As discussed in Response HZ-1, RTC p. 4-550, the text on Draft EIR pp. 90 and 91 have been revised as follows:

IPM is a multistep ecologically based approach that enables staff to make decisions about where, when, and how resources should be best allocated to control pests. Conventional pest control

¹⁷⁹ Hand edits to 2005 SNRAMP text from Dr. Roy A. Woodward, Ph.D., Senior Environmental Scientist, Natural Resources Division, State of California, Department of Parks and Recreation, no date.

¹⁸⁰ Peer review of the Public Draft Significant Natural Resource Areas Management Plan, June 2005, Peggy L. Fiedler, Ph.D., Senior Scientist II/Associate, BBL Ecosystem Science and Restoration Services to Ms. Lisa Wayne, San Francisco Recreation and Parks, September 29, 2005.

methods attempt to control the symptoms of a pest problem, but IPM is a proactive strategy that focuses on identifying and reducing, or eliminating, the root cause of a pest problem. IPM implements effective, long-term management solutions through the use of a broad range of expertise, a combination of treatment methods, and comprehensive monitoring and evaluation.

In accordance with Chapter 39 of the San Francisco ~~Administrative-Environment~~ Code, the Natural Areas Program employs IPM as its strategy for preventing new and managing existing pest infestations. Four general weed management strategies exist: prevention, containment, reduction, and eradication; each of these results in a different level of weed control and reflects available resources. The Natural Areas Program's policy is to use the least-toxic control methods whenever feasible and practical. In addition, to reduce the need for pesticides, manual pest control efforts are employed by a collaborative effort between SFRPD employees and volunteers. Apart from the 10 full-time staff that conduct management and maintenance actions within the Natural Areas, the Natural Areas Program also has a robust volunteer program, with individual groups that range in size from 10 to 50 people.

Factors that make manual and/or mechanical methods impractical include:

- Direct threats to human health and safety (e.g., steep, inaccessible, unstable slopes, significant poison oak infestations, etc.);
- Large infestations requiring ongoing repeated strenuous physical labor, such as picking and lifting, that may cause injury to staff, contract field crews, or volunteers; and
- Areas where access, human trampling, or soil disturbance may directly or indirectly damage native plant communities, affect wildlife, or cause soil erosion.

Management methods to be employed by the Natural Areas Program include:

- Physical control methods employed by Natural Areas Program staff and volunteers, which range from hand-pulling weeds to the use of hand and mechanical tools to uproot, girdle, or cut plants;
- ~~Biological~~ Pest control,¹⁸¹ which, in the case of the Natural Areas Program, involves revegetating cleared areas and introducing native plants in an area to encourage competition with weeds; and
- Chemical control, which involves the use of herbicides to suppress wildland weeds; ~~and~~ in compliance with the San Francisco Pest Management Ordinance.
- ~~Public education and outreach.~~

Only aquatic-specific herbicides (those determined safe for aquatic life) would be applied to wetlands and to areas next to water bodies. The application of herbicides, including Garlon and Roundup, is not allowed within 15 feet of either side of established trails.

¹⁸¹ Pest control generally involves the management of pests (insects, diseases, weeds) by manipulation of the environment or implementation of preventive practices including using plants that are resistant to pests, raising the mowing height of turf to shade out weeds, aerating turf to reduce compaction and plant stress, or dethatching to remove habitat, food sources and impediments to management.

As discussed in Response GE-1, RTC p. 4-491, the text on Draft EIR p. 94 has been changed to add the following paragraph after the second bullet on the page:

Where alternative materials are available to achieve the intended erosion control objectives while also minimizing inadvertent impacts to wildlife and habitat, a preference would be given to the use of biodegradable, certified weed-free, and wheat-free erosion control materials. To help ensure that appropriate materials are used that are compatible with the materials and features present at the sites in which they are used, a qualified SFRPD biologist would be consulted during design of erosion control measures.

As discussed in Response PD-13, RTC p. 4-181, the beginning of the only full paragraph on Draft EIR p. 98 has been changed as follows:

The Sharp Park Restoration project is a voluntary and discretionary action by the City, a primary purpose of which is to provide higher quality habitat for the San Francisco garter snake, a State and Federally endangered species, as well as a species identified as fully protected under the State Fish and Game Code, and the California red-legged frog, a State threatened species; further, it is an action that is consistent with the species recovery objectives of both the federal Endangered Species Act and the California Endangered Species Act. The improvements to protect and enhance the California red-legged frog and San Francisco garter snake at Laguna Salada under measure SP-4a are focused on restoring the marsh complex and associated uplands. ...

As discussed in Response BI-7, RTC p. 4-378, after the first paragraph on Draft EIR p. 102, the following text is added:

To facilitate the proposed sediment and emergent vegetation removal and to reduce potential impacts to California red-legged frog, suction hydraulic equipment may be used in consultation with the USFWS and CDFW to minimize the disturbance of sediments in the water. While generally resulting in a higher percentage of water in the excavated materials than a clamshell dredge, the use of suction hydraulic equipment generally results in less turbidity and overall disturbance at the point of use than a clamshell. In sensitive environments, the use of suction hydraulic equipment is often preferred, provided that the excavated materials and residual water are properly handled. If suction hydraulic equipment is to be used as part of this project, the slurry that is created by suction hydraulic equipment would go into a settling area until the sediments settle out and the decant water can be tested for its acidity. If the result of such testing indicates that the water is pH neutral, it would either be released into the Horse Stable Pond or pumped into the Pacific Ocean. No permit is required for discharges from the Laguna Salada Wetland Complex into the Pacific Ocean because both the Laguna Salada Wetland Complex and the Pacific Ocean are considered "waters of the United States" under the federal Clean Water Act. However, should any permit be required by SFBRWOCB or any other resource agency for the proposed SNRAMP project, SFRPD will seek such a permit and comply with any and all conditions that are attached to the permit, as already indicated by Table 3, Potentially Required Regulatory Approvals, p. 81.

As discussed in Response PD-13, RTC p. 4-181, the text on Draft EIR p. 103, lines 7 to 10, has been changed as follows:

Following completion of each season's restoration activities (anticipated between May 1 and October 15), those staging and storage areas that are not permanently modified (or identified as staging or storage areas for the next season's restoration activities) would be scarified, recontoured, and hydroseeded with native vegetation to approximate their pre-disturbance condition.

As discussed in Response BI-7, RTC p. 4-378, the fourth paragraph of Draft EIR p. 103 has been changed as follows:

To protect the California red-legged frogs and San Francisco garter snakes during restoration work, the SFRPD anticipates conducting the restoration activities between May 1 and October 15 and would continue to coordinate the planning and undertaking of these activities with the USFWS and CDFG; this activity period avoids the breeding season for the California red-legged frog and the season when San Francisco garter snakes are inactive in their winter burrows. ...

As discussed in Response PD-12, RTC p. 4-173, the following paragraph has been added to Draft EIR p. 104 following Table 4, Laguna Salada Habitat Types within Restoration Footprint has been changed to clarify the changes to the Sharp Park Natural Area boundary resulting from completion of the Sharp Park Restoration Project, as follows:

Following completion of the Laguna Salada Sharp Park Restoration Project, those areas that were previously designated as part of the golf course that have been restored to provide habitat for special-status species would become part of the Sharp Park Natural Area.

As discussed in Response BI-32, RTC p. 4-459, the text on Draft EIR p. 109, fourth bullet, has been changed as follows:

GR-4c – If surveys indicate that parasitism by brown-headed cowbirds or predation by crows, European starlings, English house sparrows, or other bird species subsidized by human activities is a significant problem, consult with the CDFG and the USFWS to determine the proper protocols course of action, if any, to address population increases of these species and to minimize the negative effects of ~~this~~ these species on local breeding birds.

As discussed in Response AE-1, RTC p. 4-228, a footnote has been added to Table 5 on Draft EIR p. 114 to indicate that the replacement locations have not yet been determined, as follows:

*The total acreages for the management areas do not exactly match the Natural Areas acreages. The Natural Areas acreages are based on vegetation series within each Natural Area where the geographic information system data was precisely clipped to the Natural Area boundary. Management areas were created by mapping their boundaries in the field with a GPS unit. This data was then edited by Natural Areas Program staff to match Natural Areas boundaries. This process created minor errors when the management area appeared to line up with the Natural Area boundary but in fact was off by a small amount. The average error is about 0.1 acre and never more than 0.8 acre. As would be expected, the error is largest in the larger Natural Areas because they have relatively longer boundaries.

**The SFRPD would monitor dog use and impacts on oak woodlands at Buena Vista and Golden Gate Park Oak Woodlands and impacts on small wildflower meadows in McLaren Park.

***Glen Canyon Park and O'Shaughnessy Hollow are two different Natural Areas; they are grouped together in this table, as they are in the SNRAM.

****The acreage of the management areas within McLaren Park have been revised to reflect the exclusion of a portion of the Amazon Reservoir Tract that is under the jurisdiction of the SFPUC. Information regarding the number of trees, trails, or DPAs within the SFPUC Amazon Reservoir Tract and SFRPD McLaren Park is not available.

Note: All trees removed would be replaced, although not necessarily with the same species or within the same Natural Area.

As discussed in Response PD-35, RTC p. 4-219, the text on Draft EIR p. 143, line 14, has been changed as follows:

Mori Point, ~~recently~~ acquired by the GGNRA in 2004, borders the southwestern edge, and the Sweeny Ridge GGNRA borders the park on the southwestern and eastern edges.

As discussed in Response PD-29, RTC p. 4-212, the text on Draft EIR p. 144, seventh bullet, has been changed as follows:

- SP-3a – Preserve natural or biodegradable elements (branches, trees, and logs) during vegetation management and remove other materials. Elements that are contaminated with invasive species (such as invaded with ripe seeds, cape ivy, untreated [chemically] eucalyptus trees, etc.) would not be retained;

5.A.4 Chapter IV: Plans and Policies

As discussed in Response RE-1, RTC p. 4-311, Draft EIR p. 155, line 29, has been changed as follows:

The SFRPD welcomes dogs on leashes in most of its parks; dogs are allowed off-leash in 19 over 30 existing designated areas DPAs totaling over 120 acres in San Francisco, seven of which are located in the Natural Areas.

5.A.5 Section V.C: Aesthetics

As discussed in Response AE-2, RTC p. 4-223, Draft EIR p. 191, line 14, has been changed as follows:

The proposed project would alter scenic resources within the Natural Areas. This would involve, for example, placement of brush piles and large woody debris, contouring the topography of an area differently and removing certain invasive vegetation to enhance habitat and establish native vegetation.

As discussed in Response AE-3, RTC p. 4-224, Draft EIR p. 195, lines 7 to 8, has been changed as follows:

From close-range locations, the aesthetic experience for some visitors using trails in Natural Areas would change in some locations as some plants are removed and others planted. For example, areas where blue gum eucalyptus trees would be removed and replaced with smaller statured trees and shrubs would appear different over time. However, landscapes in the Natural Areas change over time, and the overall vegetated character of the areas would be retained.

As discussed in Response RE-10, RTC p. 4-339, Draft EIR p. 195, following the second full paragraph, has had new text added as follows:

Three-foot-high post-and-rail fences would be installed in some Natural Areas as required to protect human health and safety, reduce soil loss, protect water quality, and conserve habitat.

As discussed in Response AE-2, RTC p. 4-223, Draft EIR p. 197, last paragraph, has been changed as follows:

Routine maintenance activities involving invasive weed and tree removal, placement of brush piles and large woody debris, plantings, and maintenance of trails, catchment basins, and sediment dams are described in Section III.F.2.

5.A.6 Section V.D: Cultural and Paleontological Resources

As discussed in Response CP-2, RTC p. 4-246, Draft EIR p. 208 the following paragraph is added after the last paragraph:

The Planning Department acknowledges that two of the seven members of the Historic Preservation Commission disagree with the EIR's conclusion that the Sharp Park Golf Course retains sufficient integrity to be designated a historic resource. While many comments were received on the EIR in support of the conclusion that the Golf Course is a historic resource, other comments suggest that the golf course does not retain sufficient integrity and question the identified period of significance (1910-1930). A disagreement among experts does not make an EIR inadequate, but these points of disagreement are discussed here in compliance with CEQA Guidelines Section 15151. In instances where a potential resource has strong evidence of historical significance, the San Francisco Planning Department takes a conservative approach to its determinations, thereby ensuring that preservation is appropriately administered. These points of disagreement do not change the conclusions in this EIR.

As discussed in Response CP-5, RTC p. 4-259, Draft EIR p. 219, Mitigation Measure M-CP-1, has been changed as follows:

M-CP-1: Consultation with the San Francisco Planning Department

The SFRPD would coordinate with the San Francisco Planning Department's Historic Preservation Specialists-Planners and would submit plans before constructing stabilizing and erosion control measures that require installation of structures, such as gabions, near ~~any~~ potentially eligible resources. Should it be determined that a Historic Resource Evaluation is required, that evaluation shall be completed by a qualified professional landscape architectural historian. The Planning Department would assist in determining if any proposed construction or other activities would impact identified historic resources under CEQA on a site-by-site basis; if such impacts may occur, the project would be required to be redesigned to avoid significant impacts to historic architectural resources. The Planning Department would also assess potential impacts on any historic landscapes that are present.

As discussed in Response CP-9, RTC p. 4-270, the text on Draft EIR pp. 219 and 220 has been changed as follows:

Impact CP-2. Invasive tree and vegetation removal and planting activities, as part of programmatic projects, would not result in a substantial adverse change in the significance of cultural ~~historic~~ landscapes or urban forests. (Less than Significant)

Several of the management activities proposed in the SNRAMP could adversely affect any present historical architectural resources. In addition to those discussed above, adverse effects could also result from vegetation changes within a Natural Area that may alter potential cultural ~~historic~~ landscapes.

There are four types of cultural landscapes according to the Cultural Landscape Foundation¹⁸² (and a site can fall under more than one category):

- **Historic Site (or Historic Landscape):** a landscape significant for its association with a historic event, activity, or person.
- **Ethnographic Landscape:** a landscape containing a variety of natural and cultural resources that the associated people define as heritage resources.
- **Vernacular Landscape:** a landscape that evolved through use by the people whose activities or occupancy shaped that landscape. Through social or cultural attitudes of an individual, family or a community, the landscape reflects the physical, biological, and cultural character of those everyday lives.
- **Designed Landscape:** a landscape that was consciously designed or laid out by a landscape architect, master gardener, architect or horticulturist according to design principles or an amateur gardener working in a recognized style or tradition.

Such changes include tree removal, which is proposed for 15 of the 32 Natural Areas and affects approximately 16 percent of the invasive trees in urban forests (San Francisco Park and Recreation Department 2006). As mentioned above, the Natural Areas that contain urban forest stands are Lake Merced, Glen Canyon Park, Bayview Park, McLaren Park, Mount Davidson, Interior Greenbelt, Dorothy Erskine Park, Corona Heights, and Sharp Park. These stands have not been evaluated for their historic significance; therefore, they are treated as potentially historic urban forests or historic landscapes.

Impact AE-1 in the Aesthetics section addresses the tree removal at Mount Davidson and Sharp Park and concludes that invasive tree and vegetation removal would not be noticeable at these Natural Areas and therefore it would not materially affect their significance as historic resources. Impacts to these potential historic resources through tree removal, which is detailed in Chapter III and in the Urban Forestry Statements in Appendix F of the SNRAMP, “could be beneficial to potential historic urban forests or historic landscapes because removing trees (through thinning and group selection) while maintaining the existing forest (which would occur in MA-3) would improve the health of the forest by relieving crowding and encouraging growth.” Other Natural Areas would experience less tree removal than Sharp Park and Mount Davidson, and, as a result, would experience lower impacts.

An HRER was prepared for Mount Davidson, and it was determined that invasive tree and vegetation removal as well as planting activities will not result in any significant changes to the historic or ethnographic landscape at Mount Davidson (CCSF 2011a). Selective tree removal would help to restore the historic balance of tree species within the forest and preserve its historic character. The project would not cause a substantial adverse change in the significance of the resource such that the significance of the resource would be materially impaired. For the other San Francisco Natural Areas containing urban forest stands, there would be a relatively lower amount of tree removal than Mount Davidson, and, as a result, similar or lower impacts to potentially historic landscapes.

The HRER provides additional information supporting the conclusion that the site is potentially eligible for listing on the California Register under Criteria 1 (Event) and 2 (Persons) as an ethnographic landscape:

¹⁸² <http://tclf.org/landscapes/what-are-cultural-landscapes>, accessed on August 8, 2015.

Sutro, known for his Comstock Lode engineering and as a philanthropist, and specifically his conservationist activities, purchased the Mount Davidson (then known as Blue Mountain) property in 1881 and began planting the forest circa 1885. This activity occurred around the same time that Sutro was helping to organize the first California Arbor Day held in 1886. The original forest was planted with pine, cypress, and eucalyptus trees; however, over time the eucalyptus have begun to dominate and have occasionally been thinned to retain the diversity of the forest. The property was transferred to A.S. Baldwin in 1909. During this time the mountain was given the name 'Mount Davidson', and the first public trails were established on the property. In 1923 the first Easter ceremony was held at the top of the mountain, beginning the tradition which continues through today. The property was finally purchased by the City in 1927 and the land was dedicated as a city park in 1929. In the same year as the park dedication, a permanent cross was constructed at the mountaintop for the yearly Easter services. As noted above the park became the site of a WPA-era work project between 1936 and 1943. Based upon these facts, the period of significance for the potential historic landscape would appear to be 1885-1943, beginning with the forest planting and extending through to what appears to be the last major improvement project for the park.

In summary, the HREER identified and evaluated the urban forest at Mount Davidson as potentially eligible for listing on the California Register under Criteria 1 (Event) and 2 (Persons) as an ethnographic landscape and treated it as a historic urban forest or historic landscape. The fact that the forest has existed since approximately 1885 and has since taken on importance to the City and the local residents could also give it standing as a vernacular landscape.

According to NPS Preservation Brief 36, a historic vernacular landscape is "a landscape that evolved through use by the people whose activities or occupancy shaped that landscape. Through social or cultural attitudes of an individual, family or a community, the landscape reflects the physical, biological, and cultural character of those everyday lives. Function plays a significant role in vernacular landscapes. They can be a single property such as a farm or a collection of properties such as a district of historic farms along a river valley." Several features or events could qualify Mount Davidson as a vernacular landscape: (1) the citizens' campaign to preserve Mount Davidson as a public park; (2) the site's home to the 1934 Mount Davidson Cross and the annual Easter sunrise service (that began in 1923); (3) the use of the Park as a place for recreation and contemplation; and (4) as a place that supports a rich biological community that would be enhanced through implementation of the SNRAMP. However, the essential function of Mount Davidson would not change with implementation of the SNRAMP. The cross would remain, the Easter services would be held, recreational activities would continue to be promoted, biological diversity would increase, the urban forest would be maintained according to SNRAMP principles and recommendations, and views of the site would not be materially altered. Further, if the site were classified as a vernacular landscape, it would be afforded no more or different protection than is offered by its classification as an ethnographic landscape or historic landscape or site.

Lastly, this site would likely not qualify as a designed landscape because there is insufficient evidence to demonstrate that it was consciously designed or laid out according to specific design principles or recognized landscape styles or traditions; however, the site's potential designation as a vernacular landscape is evaluated in this response.

Based on the above, invasive tree and vegetation removal would not result in a substantial adverse change in the significance of historic landscapes or historic forests and this impact would be *less than significant*.

As discussed in Response CP-5, RTC p. 4-259, Draft EIR pp. 222 to 223, Mitigation Measure M-CP-7, Documentation of the Sharp Park Golf Course, has been changed as follows:

M-CP-7: Documentation of the Sharp Park Golf Course

The SFRPD ~~would document, or~~ would retain a consultant with expertise in historic golf course renovation and with specific expertise, if possible, in golf courses designed by Alister MacKenzie to document, and preserve the historic character-defining features of the Sharp Park Golf Course before wetland restoration activities take place. The National Park Service has published guidance for preserving cultural landscapes in Preservation Brief 36: Protecting Cultural Landscapes, Planning, Treatment, and Management of Historic Landscapes and in the more complete Secretary of the Interior's Standards for the Treatment of Historic Properties Guidelines for the Treatment of Cultural Landscapes. The appropriate level of documentation would be selected by a qualified professional landscape architectural historian who meets the standards for history, architectural history, or architecture (as appropriate) set forth by the Secretary of the Interior's Professional Qualification Standards, (36 CFR, Part 61). The documentation would consist of the following:

- Full sets of measured drawings depicting existing or historic conditions of the Sharp Park Golf Course;
- Digital photographs of the Sharp Park Golf Course;
- A written history and description of the Sharp Park Golf Course and its alterations.

The professional landscape architectural historian would prepare the documentation and submit it for review and approval by a San Francisco Planning Department Preservation Specialist. The documentation would be disseminated to the San Francisco Library History Room and the SFRPD Headquarters.

5.A.7 Section V.F: Recreation

As discussed in Response RE-1, RTC p. 4-311, Draft EIR p. 254, first paragraph, has been changed as follows:

There are ~~19~~ over 30 existing designated DPAs totaling over 120 acres that support off-leash dog use within San Francisco, seven of which are located in the Natural Areas. They are Bernal Hill, Buena Vista Park, Corona Heights, Golden Gate Park Oak Woodlands, Lake Merced, McLaren Park, and Pine Lake.

As discussed in Response PD-13, RTC p. 4-175, Draft EIR p. 261, first partial paragraph, has been changed as follows:

... significantly affecting this recreation facility. However, with implementation of M-RE-6, which calls for retaining the golf course as an 18-hole course, this impact would be reduced to *less than significant*. It is anticipated that during construction, public access to some holes may be temporarily restricted in order to allow movement of heavy equipment and machinery; however, since construction impacts would be temporary and limited in extent and duration, these impacts would also be less than significant.

As discussed in Response CP-4, RTC p. 4-255, the text on Draft EIR p. 261 has been changed as follows:

M-RE-6: Restoration of the Sharp Park Golf Course to 18 Playable Holes

The SFRPD shall coordinate with a golf course consultant with expertise in historic golf course renovation and with specific expertise, if possible, in golf courses designed by Alister MacKenzie, to restore the playability of the Sharp Park Golf Course, while documenting and preserving the historic character-defining features of the course and avoiding impacts to sensitive biological resources; this ~~which~~ would involve replacing Hole 12 either on the west (Option 1) or east (Option 2) side of Highway 1. Replacing the hole on the west side of Highway 1 may also require moving an additional hole west of the highway to retain playability and flow of the course, thereby increasing the number of holes west of the highway to 15 and decreasing to three the number of holes to the east. Creating a new hole east of Highway 1 would decrease the number of holes west of the highway to 13 and increase to five the number of holes to the east. The determination of where the replacement hole is constructed and whether additional holes need to be moved ~~would~~may require additional environmental review.

As discussed in Response RE-2, RTC p. 4-313, the cumulative impact analysis provided in Impact RE-7 on Draft EIR pp. 261 and 262 has been changed as follows:

Impact RE-7: The proposed project, in combination with other planned and foreseeable future projects, would result in a cumulatively considerable significant impact related to recreation. (Significant and Unavoidable)

The geographic scope of this analysis includes San Francisco and Pacifica. Cumulative projects that would have an impact on recreation resources include those that reduce the overall recreation experience provided by the Natural Areas. This includes projects that may result in a significant increase in the regional population resulting in overcrowding of the Natural Area, a decrease in currently available recreation opportunities, consequently putting increased pressure that is unable to be absorbed by other Natural Areas, or a physical or visual change in the landscape that adversely impacts the appeal of a Natural Area.

Implementation of the proposed GGNRA Dog Management Plan ~~may~~would further restrict dog access and off-leash areas within GGNRA land holdings, including Fort Funston (near Lake Merced), Fort Mason, Crissy Field, Fort Point National Historic Site, Baker Beach, Lands End, Fort Miley, Sutro Heights Park (near Balboa), Ocean Beach (the north end near Balboa), Milagra Ridge (near Sharp Park), Mori Point (near Sharp Park), and Sweeney Ridge (near Sharp Park). At both Fort Funston and Milagra Ridge, as part of the GGNRA General Management Plan, recreational activities would be provided in a more natural setting to protect natural ecosystems and sensitive habitats.

The GGNRA Dog Management Plan¹⁸³ designates specific areas where dogs would be required to stay on leash, where dogs may be allowed off-leash, but only when under immediate voice and sight control, and where dog walking would be prohibited. In San Francisco, off-leash dog walking would be permitted in six areas: Fort Mason; Crissy Field (two areas); Ocean Beach; and Fort Funston (two areas).

The most popular locations for GGNRA dog use is Crissy Field and Fort Funston. At Fort Funston, of the total of 180 acres (excluding the 10-acre Bank Swallow Protection Area), approximately 95 acres are steep cliffs or dense vegetation and are not accessible for any use. Of the remaining 85 acres, 35 acres (or 41 percent) would be available for off-leash dog use. At Crissy Field, 30 percent of the airfield and 40 percent of the beach front mileage would be available for off-leash dog use. Overall, of the 8.7 miles of beaches within GGNRA jurisdiction, about 2.3 miles (over 26 percent) would be available for off-leash dog use. In addition, much of the remaining GGNRA lands would be open to dogs on-leash.

To collect current and detailed information regarding visitor use of the park by dog owners, NPS conducted a survey in 2012 to measure customer satisfaction related to dog walking at the GGNRA sites and to determine where visitors would go if they were not satisfied. This survey, the *GGNRA Dog Walking Satisfaction Visitor Study*, evaluated the perception of and satisfaction with the current on and off-leash GGNRA dog walking policies by both dog walkers and non-dog walkers, and the potential for redistribution of use based on the proposed access changes. Of the approximately 7,000 individuals contacted, 897 responded to the survey. Respondents included 662 dog walkers, 20 commercial dog walkers, and 212 individuals who do not walk dogs at the park. These same respondents were then asked where they would go (either inside or outside GGNRA) as an alternative site for dog walking. The five most popular alternative sites indicated in the survey for off-leash dog walking included Pine Lake/Stern Grove, Golden Gate Park (all areas), McLaren Park, Ocean Beach, and Alta Plaza.

In addition, the SNRAMP proposes to close the Lake Merced DPA and reduce the size of the DPAs at Bernal Hill and McLaren Park. Of the DPAs impacted by the SNRAMP, only McLaren Park was identified by the GGNRA visitor study survey as a potential alternative off-leash dog-walking site. On-leash dog use would still be allowed at these and all other Natural Areas (except at Lake Merced). Nonetheless, the combined reductions in off-leash areas proposed by the GGNRA and the SFRPD could result in an increase in dog use at the remaining Natural Areas, including McLaren Park, which would be reduced by 8.3 acres, with 53.4 acres remaining.

¹⁸³ The GGNRA Draft Dog Management Plan/Supplemental Environmental Impact Statement (SEIS), which contained six alternatives, was released in September 2013. Subsequently, in February 2016, the Proposed Rule for Dog Management in the GGNRA was released for a 60-day comment period. On February 24, 2016, the Proposed Rule for Dog Management in the GGNRA opened for a 60-day public comment period on www.regulations.gov (RIN 1024-AE16). The comment period was later extended to 90 days and ended on May 25, 2016. All substantive comments on both the SEIS and Proposed Rule will be documented and responded to by NPS in a Final Environmental Impact Statement FEIS. These comments, along with relevant data, expert opinions, and other facts accumulated during the SEIS and Proposed Rule stages, will be evaluated by NPS to determine whether the proposed solution will help accomplish the goals and solve the problems identified in the SEIS before moving forward with a Final Environmental Impact Statement, Record of Decision, and Final Rule. While no specific alternative has been selected, it is reasonable to assume that the reduction in off-leash dog play areas would occur as a result of implementation of one of the Plan's alternatives.

Consistent with the conclusion of the cumulative analysis contained in the GGNRA Supplemental Environmental Impact Statement,¹⁸⁴ it is speculative to precisely identify the magnitude or location of redistribution of dog walkers related to the implementation of the SNRAMP in combination with the GGNRA Dog Management Plan. Numerous factors are difficult to predict, including human behavior, level of future restrictions within and outside of the Natural Areas and GGNRA lands, and physical factors, such as driving distances.

While both the SNRAMP and GGNRA propose the reduction of off-leash DPAs, new or improved DPAs may be pursued in San Francisco by the SFRPD and/or through community-driven efforts, although none are proposed or envisioned in the Natural Areas. However, for the purposes of this EIR, it is assumed that no new DPAs are reasonably foreseeable to provide a worst-case analysis. It is further assumed that An increase in dog use at the Natural Areas could accelerate the physical deterioration of those DPAs and the Natural Areas in general, and. Given the speculative nature of the increased level of use that could result from these proposals, the impacts to recreation are conservatively determined to be significant from the combined cumulative projects. The contribution of the SNRAMP project to this potentially significant impact would be cumulatively considerable, specifically as a result of the closure of the Lake Merced DPA.

DPAs within the Natural Areas would continue to be evaluated in accordance with the SFRPD's Dog Policy, and the SFRPD would monitor DPAs for their effects on the Natural Areas and develop solutions to any identified issues. ~~These established procedures are considered adequate, and further monitoring procedures would not be expected to reduce the impact.~~ The potentially significant impact to recreational resources as a result of increased use resulting from cumulative actions could be mitigated by adding a new DPA at a nearby Natural Area or other nearby property. However, as discussed above, adding a new DPA may not mitigate impacts from reducing or closing DPAs because it is speculative to precisely predict the magnitude or location of redistribution of dog walkers related to the implementation of the SNRAMP in combination with the GGNRA Dog Management Plan. Numerous factors are difficult to predict, including human behavior, level of future restrictions within and outside of the Natural Areas and GGNRA lands, and physical factors, such as driving distances. Therefore, no feasible mitigation exists that would reduce this impact. ~~as discussed in this document, there is a current moratorium¹⁸⁵ on new DPAs, and the mitigation, therefore, would not be feasible.~~ As a result, this impact would be *significant and unavoidable*.

As discussed in Response CP-4, RTC p. 4-255, the text on Draft EIR p. 264 has been changed as follows:

M-RE-6: Restoration of the Sharp Park Golf Course to 18 Playable Holes

The SFRPD would coordinate with a golf course consultant with expertise in historic golf course renovation and with specific expertise, if possible, in golf courses designed by Alister MacKenzie, and would to restore the playability of the Sharp Park Golf Course, ~~which while~~

¹⁸⁴ National Park Service, Golden Gate National Recreation Area California, Draft Dog Management Plan/Supplemental Environmental Impact Statement, Fall 2013 (page 354).

¹⁸⁵ There is direction from the Recreation and Park Commission not to establish new DPAs until systemwide DPA planning is completed. For the purposes of this EIR, this is considered a moratorium in that no new DPAs are reasonably foreseeable. This direction was announced at the October 10, 2006, meeting of the San Francisco Dog Advisory Committee.

documenting and preserving the historic character-defining features of the course and avoiding impacts to sensitive biological resources; this would involve replacing Hole 12 either on the west (Option 1) or east (Option 2) side of Highway 1. Replacing the hole on the west side of Highway 1 may also require moving an additional hole west of the highway to retain playability and flow of the course, thereby increasing the number of holes west of the highway to 15 and decreasing to three the number of holes to the east. Creating a new hole east of Highway 1 would decrease the number of holes west of the highway to 13 and increasing to five the number of holes to the east. The determination of where the replacement hole is constructed and whether additional holes ~~require need to be moved~~ would be evaluated under a separate may require additional environmental review.

5.A.8 Section V.G: Biological Resources

As discussed in Response BI-1, RTC p. 4-351, Draft EIR p. 279, Table 9, State and Federally Listed Species That May Occur Within the Natural Areas, has been revised to add the following species:

<u>Burrowing Owl</u>	<u><i>Athene cunicularia</i></u>	<u>--/CSC/--</u>	<u>Arid to semi-arid grasslands, with well-drained, level to gently sloping areas. Requires mammal burrow or natural hollow surrounded by sparse vegetation for breeding habitat.</u>	<u>P/ Observed near Hawk Hill and Corona Heights. The Golden Gate Audubon Society reports sightings at East Shore State Park, Cesar Chavez Park and the Tom Bates Sports Complex in Berkeley, at Martin Luther King, Jr. Shoreline Park in Alameda, and in some South Bay locations.</u>
<u>California clapper rail</u>	<u><i>Rallus longirostris obsoletus</i></u>	<u>FE/SFP/--</u>	<u>Freshwater marshes, wet meadows, and shallow margins of saltwater marshes.</u>	<u>P/ Observed at Heron's Head Park near India Basin.</u>

As discussed in Response BI-2, RTC p. 4-354, Draft EIR p. 293 has been changed as follows:

Before implementing the proposed Sharp Park restoration, the SFRPD would be required to undertake the following, consistent with state and federal laws:

- Apply for a Section 404 permit from USACE, which would require, prior to issuance of the Section 404 permit, consultation with the USFWS regarding the biological assessment and issuance of a Biological Opinion and incidental take permit.
- Request a Section 401 water quality certification from San Francisco Bay Regional Water Quality Control Board, or a waiver thereof.
- Prepare a Biological Assessment and consult with the USFWS, through the USACE permitting process, to obtain a Biological Opinion and incidental take permit in accordance with the ESA.
- Coordinate with CDFG for a consistency determination for federally and state protected species (San Francisco garter snake and California red legged frog)
- Apply for a take permit for state only listed species (western pond turtle) pursuant to Section 2081(b) of the CESA;

- ~~Obtain a permit from the US Army Corps of Engineers under Section 404 of the Clean Water Act;~~
- ~~Obtain a water quality certification from the SFBRWQCB under Section 401 of the Clean Water Act;~~
- Obtain a Streambed Alteration Agreement from the CDFG under Section 1602 of the California Fish and Game Code; and
- Obtain a Coastal Development Permit, as required by the CCC.

As discussed in Response BI-1, RTC p. 4-351, Section 1.a of M-BI-1a, Protection of Protected Species and Riparian and Wetland Habitat, Draft EIR p. 299, has been revised, as follows:

For protected species and the fully protected California clapper rail, a qualified SFRPD biologist¹⁸⁶ shall survey for suitable habitat within the project area before the project begins, according to USFWS and CDFW protocol for the protected species having the potential to occur. If no protocol exists, surveys shall be conducted according to generally accepted survey methods. If individuals were found or if it is determined that the potential exists for protected species to be present, the SFRPD shall redesign the proposed project to avoid impacts on protected species. Avoidance/minimization measures shall include conducting project activities during periods of the species lifecycle when the species would not be affected or may be minimally affected by project activities. SFRPD shall not perform any activities that would result in take (as defined by California laws for fully protected species) of California clapper rails. If it is infeasible to avoid disturbance ~~of~~ to other protected species (besides the California clapper rail), the SFRPD will contact the USFWS or CDFW and undertake appropriate consultation according to the CESA or ESA (unless an existing Biological Opinion is already in place and the proposed activities fall under the actions of that Biological Opinion, as may be the case for impacts to the mission blue butterfly at Twin Peaks). Any additional requirements agreed to during consultation with the USFWS and CDFW, or other regulatory agencies, to protect the species would be implemented, including restoration and compensation, where required.

As discussed in Response BI-1, RTC p. 4-351, Draft EIR p. 303, second full paragraph, has been changed as follows:

~~State and federally listed bird species have been recorded nesting at Sharp Park and Lake Merced.~~ The double-crested cormorant (*Phalacrocorax auritus*) presently nests at Lake Merced and the salt marsh common yellowthroat (*Geothlypis trichas sinuosa*) presently occurs at Lake Merced and Sharp Park. The yellow warbler (*Dendroica petechia*) and bank swallow (riparia) have also been observed at Lake Merced. The double-crested cormorant nests on coastal cliffs and in trees. The salt marsh common yellowthroat requires saltwater or freshwater marsh and dense vegetation for nesting. The yellow warbler requires riparian woodlands and the bank swallow requires vertical cliffs near water bodies. The California clapper rail (*Rallus longirostris obsoletus*) has been observed near India Basin Shoreline Park. According to the Golden Gate Audubon Society (as reflected in their comment later dated October 31, 2011), during the bird breeding season of 2011, California clapper rail young were observed on multiple occasions at Heron's Head Park (north of the wetlands at India Basin Park). The Golden Gate Audubon Society further stated that this was the first detection

¹⁸⁶ A SFRPD biologist knowledgeable about protected species occurring within the area proposed for disturbance. If no SFRPD biologists are familiar with the protected species occurring in the area proposed for disturbance, the SFRPD would be required to obtain a qualified biologist to conduct protected species surveys.

of (likely) breeding California clapper rail in a considerable period, and it is believed that the nesting pair derived from rail populations further south in the Bay. In addition, the burrowing owl (*Athene cunicularia*) has been observed near Hawk Hill and Corona Heights, and the Golden Gate Audubon Society reports sightings at East Shore State Park, Cesar Chavez Park, and the Tom Bates Sports Complex in Berkeley, at Martin Luther King, Jr. Shoreline Park in Alameda, and in some South Bay locations. Bird species protected by the MBTA may occur at these and other Natural Areas.

As discussed in Response BI-1, RTC p. 4-351, Draft EIR p. 304, first paragraph, has been changed as follows:

The yellow warbler and bank swallow have been observed foraging over Lake Merced, but have not been observed nesting there and would therefore not be impacted by invasive vegetation removal at Lake Merced. The California clapper rail breeds in salt marsh wetlands throughout the Bay. The activities in the SNRAMP at India Basin Shoreline Park that could affect California clapper rail include removal of invasive vegetation from the wetlands and planting. The burrowing owl could be affected by the removal of grasslands and other open spaces. However, in compliance with the MTBA, ...

As discussed in Response BI-29, RTC p. 4-435, Draft EIR p. 319, the first bullet has been changed as follows:

- **Mission Blue Butterfly:** This species occurs at Twin Peaks and Sharp Park. The following measures shall apply to these Natural Areas:
 - > To avoid impacts to this species, SFRPD shall adhere to the long-term management and monitoring guidelines as described in the Recovery Action Plan for the Mission Blue Butterfly at Twin Peaks Natural Area and the corresponding Biological Opinion ~~and as that has been issued by~~ agreed to with the US Fish and Wildlife Service. These guidelines include conducting vegetation removal by manual, mechanical, and chemical treatments that would be applied consistent with the SFRPD Integrated Pest Management program, such as hand pulling, cutting and grubbing. To avoid impacts from trampling of host plants by recreational users, the SFRPD shall continue to conduct regular maintenance on the existing trail network including trimming trailside vegetation and replacing trail base materials.

As discussed in Response BI-22, RTC p. 4-411, Draft EIR p. 320, second bullet, has been changed as follows:

- Converting about half an acre of wet meadow/freshwater marsh wetland to an upland refuge in the middle of the lagoon to provide snakes and frogs with refugia from feral cats and other nonnative predators; creating about an acre of replacement wet meadow wetland along the northern and western edges of the lagoon in place of coastal scrub habitat, achieving no net loss of wetland habitat; and

As discussed in Response BI-7, RTC p. 4-365, Draft EIR pp. 323 to 324, beginning with the last paragraph on Draft EIR p. 323, have been changed as follows:

California Red-Legged Frog. During restoration, impacts to California red-legged frogs from the Sharp Park restoration project would be similar to those described above for San Francisco garter snakes. Temporary impacts from construction activities would result in the disturbance of feeding,

breeding, and dispersal behaviors. The removal of encroaching vegetation may disturb California red-legged frogs sheltering within the plants. Project activities that may cause California red-legged frogs to move out of their resident habitat may cause injury or mortality due to lack of adequate forage or cover. Impacts also would occur from construction activities involving vehicle traffic and the use of heavy equipment which could result in direct mortality of individuals. Short-term impacts of construction activities that result in injury, mortality, and habitat disturbance would result in significant impacts on the frog. Implementing Mitigation Measure M-BI-6a includes pre-activity surveys, a worker education program, a biological monitor during construction activities, in addition to an on-call specialty environmental monitor with a valid 10(a)(1)(A) permit to handle California red-legged frogs and relocate as needed, and additional avoidance and minimization measures which include vegetation being cleared by hand equipment to a height of 4 inches and checked for the presence of frogs prior to construction and vehicles entering the site. Any relocation efforts would be coordinated with the appropriate agency to minimize any adverse effects. These measures would reduce impacts to California red-legged frogs from restoration activities. As described above, Mitigation Measure M-BI-6a would ensure that measures are taken to effectively move individuals out of harm's way. This measure would reduce the impact to California red-legged frogs by avoiding and minimizing impacts sufficiently to ensure no injury or mortality of individual frogs to the maximum extent feasible.

Sedimentation. ~~Additionally,~~ California red-legged frogs may be adversely affected by increased sedimentation caused by runoff associated with the project activities. Erosion control measures such as straw mulch, sediment traps, and wattles would be installed to eliminate the potential for sediment discharge in to the wetlands during the construction process, as described under Mitigation Measure M-HY-1. Implementing Mitigation Measures M-HY-1 and M-BI-6a, which includes measures to install silt fencing would reduce impacts to California red-legged frogs from sedimentation during restoration by avoiding and minimizing impacts to the California red-legged frog and its habitat to sufficiently avoid injury or mortality of the frog. With implementation of M-BI-6a and M-HY-1, the short-term impacts of Sharp Park restoration activities on the California red-legged frog as a result of sedimentation would be *less than significant*.

Acid Sulfate Soil Conditions. When exposed to dissolved or atmospheric oxygen, sulfides transform to sulfuric acid, which in turn results in the formation of acid sulfate soils. Environmental effects that could occur from excavating sediments in the presence of acid sulfate soils may include one or more of the following: (1) increase in sulfuric acid; (2) decline in pH; (3) increase in dissolved metal concentrations (aluminum, iron, and arsenic); and (4) increased incidence of hypoxia.¹⁸⁷ Any of the above effects could result in significant impacts (e.g., effects that could jeopardize the continued existence of a population of special-status species or effects to water quality beyond thresholds indicated in state or federal water quality standards).

A literature search indicates that very little research has been done on acid sulfate soils in the San Francisco Bay Area. One case in which acid sulfate soils have arisen as a concern is at the Bair Island tidal marsh restoration area, in Redwood City, California. In that case, the main concern was that sediments that had been excavated and stockpiled for re-use at the site contained sulfides that converted to sulfates as the sediments dried out. Re-use of these materials could result in acidic and hypoxic conditions. Aside from the case above, the literature search did not identify other studies where acid sulfate soils effects have occurred in Bay Area restoration sites.¹⁸⁸

¹⁸⁷ Harry Gibbons and Robert Plotnikoff, Tetra Tech, Inc. Acid Sulfate Soils Technical Memorandum.

¹⁸⁸ Harry Gibbons and Robert Plotnikoff, Tetra Tech, Inc. Acid Sulfate Soils Technical Memorandum.

Removal of sediment in the connecting channel between Horse Stable Pond and Laguna Salada was reported to have occurred more than 10 years ago. While it was smaller in scale than what is proposed as part of the SNRAMP project, at that time, no effects that would normally be associated with acid sulfate soils, including acidification of waters and sediment surfaces, were identified. Also, at the time of the previous removal, it was reported that the bottom of Horse Stable Pond was lined with gravel. The previous sediment removal activity removed sediments that had accumulated after the seawall was constructed. Because the sediment to be removed as part of the proposed project is likely to have only accumulated since the last removal activity, it is unlikely that acid sulfate soils would exist in the sediments to be excavated. Sources of these sediments include input from the watershed during storms, as well as accumulated organic matter from dead and decaying vegetation in the watershed complex. This means that these sediments accumulated without the saline conditions that allow acid sulfate soils to form and can be eliminated as a contributor to acid sulfate soils conditions,¹⁸⁹ supporting the conclusion that the proposed sediment and vegetation removal would not likely result in the substantial disturbance of acid sulfate soils in the water column and would not, in turn, result in a significant impact to special-status species.

In the event the acidification is detected to a degree harmful to special-status species, to ensure that residual acid sulfates in the water column would not adversely impact special-status species, Mitigation Measure M-BI-6a requires monitoring of water quality for a period of six weeks after the proposed sediment and vegetation removal is completed; it also prescribes remediation measures if the monitoring determines that such activities are warranted based on the exceedance of toxicity standards. If acid sulfate soils are present, suction hydraulic equipment could also be used to minimize suspension of sediments relative to other sediment removal methods, allowing sulfides to settle out of the water column more quickly, as indicated in Draft EIR Chapter III, Project Description, page 102.

In summary, other reasons supporting the conclusion that it would be unlikely for hypoxic conditions to occur during the proposed sediment and emergent vegetation removal include the following: (1) when sediment was previously removed from the connecting channel approximately 10 years ago, no effects that would normally be associated with acid sulfate soils, including acidification of waters and sediment surfaces, were identified; (2) the sediment to be removed as part of the proposed project has only accumulated since the last removal activity, which would have removed all the sediment that accumulated before the current seawall was constructed, and, therefore, has accumulated without the saline conditions that allow acid sulfate soils to form; (3) the Biological Opinion for the Pumphouse Project concluded that the project would not jeopardize the continued existence of California red-legged frog or San Francisco garter snake with the implementation of the Conservation Measures included in the Biological Opinion; and (4) in compliance with the Pumphouse project, soil sampling was completed and no acid soil sulfates were found. The same or similar Conservation Measures included in the Pumphouse project Biological Opinion would likely be included in the SNRAMP Biological Opinion as well, or have already been incorporated into the project mitigation measures identified in this EIR.

Should any anoxic conditions materialize, they are expected to be localized and short-term. California red-legged frog larvae and juveniles are likely to escape these small, short-lived anoxic zones as the zones dissipate with settling of the sediment and dilution by the pond.^{190,191} The

¹⁸⁹ Harry Gibbons and Robert Plotnikoff, Tetra Tech, Inc. *Acid Sulfate Soils Technical Memorandum*.

¹⁹⁰ Robert Plotnikoff, Tetra Tech, Inc. Email to Stacy Bradley, SFRPD, Suggested Change to the MND, December 3, 2013.

Biological Opinion for the Pumphouse Project concluded that the implementation of Conservation Measures would minimize the likelihood that adult or juvenile California red-legged frog would be present and would reduce potential adverse effects on the California red-legged frog due to anoxic conditions to a less-than-significant level. Similar conservation measures are included in a mitigation measure in the SNRAMP Draft EIR, and the Draft EIR independently made the same less-than-significant conclusion regarding impacts to the California red-legged frog.

Construction Effects. The Biological Opinion for the Pumphouse Project noted that because California red-legged frog and San Francisco garter snake have been observed throughout the project site, the effects of the construction activities to wetland and upland habitat and to individual California red-legged frog and San Francisco garter snake will be throughout the construction footprint. Injury, exposure disorientation and disruption of normal behaviors will likely result from the removal and/or disturbance of vegetation, sediments, and cover sites, including animal burrows, boulders or rocks, or organic debris, such as downed trees or logs in the Horse Stable Pond and the connecting channel. Construction noise, vibration, and increased human activity during construction may interfere with normal behaviors such as feeding, sheltering, movement between refugia and foraging grounds, and other essential behaviors. This can result in avoidance of areas that have suitable habitat and can cause disturbance to the species. Direct effects may include injury or mortality from being crushed by earth moving equipment, construction debris, and worker foot traffic. Work activities, including noise and vibration, may result in adverse effects to California red-legged frog and San Francisco garter snake by causing them to leave the work area. This disturbance may increase the potential for predation and desiccation.

However, the Biological Opinion¹⁹² issued by the USFWS for the Pumphouse project ultimately concluded that the project would not be likely to jeopardize the continued existence of the California red-legged frog or San Francisco garter snake with the implementation of the Conservation Measures included in the Biological Opinion; relevant measures to the Sharp Park Restoration Project are also contained in SNRAMP Mitigation Measures M-BI-1a, M-BI-6a, M-BI-6b, and M-BI-12a. These measures limit construction activities to May 1 through October 15 and also include measures to protect species, such as pre-construction avoidance and survey tasks, site monitoring by USFWS/CDFW-approved biologists during construction activities, limitations on vehicle speeds in the project area, erosion control measures, and others. These Conservation Measures are intended to minimize the likelihood for the potential take of individual California red-legged frog and San Francisco garter snake.

The Biological Opinion for the Pumphouse Project also discusses the possibility of California red-legged frog mortality through entrainment (individuals being pulled along with water and trapped against screening or pulled into the pumps) of egg masses and individual larvae at the pumps (see pages 33 and 34 in the Biological Opinion). The Biological Opinion discusses the restoration actions and conservation measures that the SFRPD will undertake in order to reduce these effects and protect the species. The same or similar these Conservation Measures included in the Pumphouse project Biological Opinion would likely be included in the SNRAMP Biological Opinion as well, or have already been incorporated into the project mitigation measures identified in this EIR

¹⁹¹ Robert Plotnikoff, Tetra Tech, Inc. Email to Alexis Ward, SFRPD and David Munro, Tetra Tech, Inc., Sharp Park, December 30, 2013.

¹⁹² U.S. Fish and Wildlife Service (USFWS), *In Reply Refer To: 08ESMF00-2012-F-0082-2, Formal Endangered Species Consultation on the Sharp Park Safety, Infrastructure Improvement, and Habitat Enhancement Project in San Mateo County, California*, October 2, 2012 ("Biological Opinion").

(SNRAMP Mitigation Measures M-BI-1a, M-BI-6a, M-BI-6b, and M-BI-12a), which would minimize the likelihood of the potential take of individual California red-legged frog through entrainment. The continued existence of California red-legged frog would not be jeopardized, and, therefore, SNRAMP construction impacts leading to frog mortality through entrainment at Sharp Park would be less than significant.

Depletion of oxygen in the water column. Anoxic sediments containing sulfides have associated bacteria like *Thiobacillus* sp. that reduce sulfur. Bacterial respiration near the bottom of a waterbody can modify oxygen concentrations in overlying water, causing some level of anoxia. When this condition occurs, the pH of the water begins to decline, resulting in an acidic environment. Depletion of oxygen in the water column is mediated by the rate of photosynthesis during peak portions of a day. The degree to which water becomes acidified depends on the length of time that sulfides are suspended in the water column and the amount of sulfides in the water column. In general, the longer that sulfidic soils are suspended in the water column, the more chance there is for acidic conditions to occur. This could cause mortality of California red-legged frog larvae and juveniles.¹⁹³ However, the Biological Opinion¹⁹⁴ issued by the USFWS for the Pumphouse Project ultimately concluded that the project would not be likely to jeopardize the continued existence of the California red-legged frog or San Francisco garter snake with the implementation of the Conservation Measures included in the Biological Opinion. The same or similar Conservation Measures included in the Pumphouse project Biological Opinion would likely be included in the SNRAMP Biological Opinion as well, or have already been incorporated into the project mitigation measures identified in this EIR (SNRAMP Mitigation Measures M-BI-1a, M-BI-6a, M-BI-6b, and M-BI-12a). A less-than-significant impact would occur with respect to depletion of oxygen in the water column as a result of implementation of the SNRAMP project at Sharp Park.

Over the long-term, the Laguna Salada restoration project would result in beneficial impacts to California red-legged frogs by converting freshwater marsh, where tadpoles are often unable to penetrate the dense vegetation and where female frogs may lay their eggs only to be left stranded above water, to open water habitat. The removal of dense emergent vegetation will allow for a higher quality of breeding habitat for the frogs which will result in an increased survival of egg masses and tadpoles. The conversion of freshwater marsh habitat to open water would discourage the growth of dense stands of bulrush and cattails that have overgrown the wetlands and reduced the quality of habitat for California red-legged frogs.

As discussed in Response BI-7, RTC p. 4-365, Draft EIR pp. 326 to 328, Mitigation Measure M-BI-6a, Protection of Protected Species during Implementation of the Sharp Park Restoration Project, p. 326, has been changed as follows:

M-BI-6a: Protection of Protected Species during Implementation of the Sharp Park Restoration Project

The SFRPD shall implement the following, subject to modification during the required regulatory approval processes:

¹⁹³ Harry Gibbons and Robert Plotnikoff, Tetra Tech, Inc. *Technical Memorandum, Revised Review of Acid Sulfate Soils, Potential Release Mechanism, and Risk of Release in the Horse Stable Pond and Connecting Channel Sediment Removal Project. August 27, 2013* (“Acid Sulfate Soils Technical Memorandum”).

¹⁹⁴ U.S. Fish and Wildlife Service (USFWS), *In Reply Refer To: 08ESMF00-2012-F-0082-2, Formal Endangered Species Consultation on the Sharp Park Safety, Infrastructure Improvement, and Habitat Enhancement Project in San Mateo County, California, October 2, 2012* (“Biological Opinion”).

Avoidance Measures:

- The number of access routes, the size of staging areas, and the total area of activity would be the minimum necessary to achieve the project goals and to the extent feasible access routes shall be located in upland areas;
- Vehicle and equipment operators would use existing access roads and would remain outside of wetlands and riparian areas that are not integral to the restoration project;
- The construction documents for the Sharp Park restoration project would identify construction staging areas, access corridors, and work zones that are least impactful to biological resources, as well as golf play and operations. Avoidance of wetlands and other biological resource areas, however, would take precedence over avoidance of golf play areas, such that golf play and operations would be impacted rather than biological resources;
- After surveying the construction site for special-status species in accordance with this mitigation measure, silt fencing or exclusion fencing would be placed around the project and staging areas to reduce the potential for animals to enter the construction site. Fencing will be monitored throughout construction to ensure no San Francisco garter snakes, California red-legged frogs, or western pond turtles enter the area; fencing will meet CDFG specifications so as to avoid impacts to species potentially getting trapped in the fence.
- No restoration and construction shall occur between November 15 and April 15, the breeding season for California red-legged frog and the season when San Francisco garter snakes are inactive in their winter burrows, although shrubs and willow posts may be planted by hand after the first rains, and weeds may be removed within 15 feet of aquatic areas during these times;
- Before moving any vehicles that remain stationary for longer than 30 minutes, the biological monitor would inspect those vehicles to ensure that no animals had crawled beneath them for cover;
- During project activities, all trash that could attract nonnative predators would be properly contained, removed from the work site, and disposed of regularly. Following project completion, all trash and construction debris would be removed from work areas.

Pre-Construction and Construction Activities:

- Prior to commencement of any on-site work related to the proposed removal of sediment and emergent vegetation in the Laguna Salada wetland complex, which includes the Horse Stable Pond and the connecting channel and culverts that link Horse Stable Pond and Laguna Salada, additional sediment core sampling tests shall be conducted, as necessary, in the manner specified in this mitigation measure to determine whether there are elevated concentrations of sulfides or other soil characteristics that would render the soils unsuitable for supporting the desired vegetation.

The results of the sediment core sampling tests shall be submitted to the USFWS and CDFW for review prior to commencement of any on-site remediation work or sediment/vegetation removal work at Horse Stable Pond or the connecting channel and culverts.

If remediation measures are required based on the results of the sediment core sampling tests, the SFRPD shall submit a remediation and monitoring plan (prepared by a qualified biological/hydrological consultant) to all applicable resource agencies for review prior to implementation of the remediation measures. Alternatively, the soils could be placed in a nonsensitive location. Copies of all correspondence with the

resource agencies shall be submitted to the ERO. The sediment core sampling tests shall include the following elements:

1. Work Plan

A Work Plan for sediment core sampling tests shall be prepared by a qualified SFRPD biological/hydrological consultant and submitted to the USFWS and CDFW for review. The Work Plan shall describe, at a minimum, compliance with Tasks 2 through 5 of this part of the mitigation measure, as well as the "During and Post-Construction pH Monitoring" requirement (see following section). Copies of all correspondence with the responsible agencies shall be submitted to the ERO.

2. Sampling of Sediment Cores

The locations of any additional sampling shall be determined pursuant to the work plan developed in accordance with Task 1, above. Sample sediment cores shall include the soils between the current surface sediment level and approximately two to three feet below the current surface. This depth shall be at least one foot below the proposed depth of the future sediment-water interface.

3. Analysis of Sediment Cores and Estimation of the Potential for Formation of Acid Sulfate Soils

The sediment cores shall be analyzed every five centimeters over the first 20 centimeters of core depth and then every 10 centimeters, or as appropriate based on field conditions, for the remainder of the core length for the following components: Total Organic Carbon (TOC), carbonate/bicarbonate, sulfate, sulfide, sulfites, pH, calcium, sodium, iron, aluminum, chloride, conductivity, redox potential, refractory organics, organic nitrogen, total phosphorus, ammonia, nitrate+nitrite nitrogen, soluble reactive phosphorus, organic phosphorus, loosely-sorbed phosphorus, iron-phosphorus, iron-phosphorus, aluminum-phosphorus, and calcium-phosphorus. Sediment core chemistry shall be analyzed to assess the potential reduction of sulfate to form hydrogen sulfate, iron sulfides, and reduction buffering capacity relative to acid-neutralizing capacity.

In addition, sediment oxygen demand (SOD) in the sediment cores shall be measured. Results shall be compared to the total oxidizable organic material, which would be estimated from the difference of TOC and refractory organic carbon (labile carbon). These results shall be used in the analysis of potential for formation of anoxic conditions within the Laguna Salada Wetlands Complex.

Sediment cores shall be analyzed based on Toxicity Reference Values (TRVs) from the USEPA and Screening Quick Reference Tables (SQuiRT) from the National Oceanic Atmospheric Administration.¹⁹⁵ A draft summary of potential toxics shall be provided to the USFW, CDFW, and ERO for review

¹⁹⁵ NOAA, Office of Response and Restoration. SQuiRT Cards. This document is available online at: <http://response.restoration.noaa.gov/cpr/sediment/squirt/squirt.html>, accessed on July 17, 2013.

and, if needed, revision will be made to the toxicity ranges appropriate for use in analyzing the sediment cores.

The potential for formation of acid sulfate soils and anoxic conditions in the water column shall be estimated based on this analysis and in coordination with the USFWS and CDFW. If this analysis determines that acid sulfate soils could be present in this location, the SFRPD shall perform a toxic pathway analysis to determine the appropriate remediation measures. The analysis results and determination shall be submitted to the USFWS, CDFW, and ERO.

4. Toxics Pathway Analysis

Should the potential for acid sulfate soils and anoxic conditions be present, a toxics pathway analysis shall be conducted for potential risks and toxicities to species that may be affected by localized increases in acidity, hypoxia, or dissolved metals concentration. During this Task, toxicity standards shall be established in coordination with the USFWS, CDFW, and ERO based on the results of Tasks 2 and 3 above, site-specific hydrologic conditions including water exchange and dissolved oxygen levels, the species that are known to be present, and literature review. The results of this task shall be submitted to the USFWS and CDFW and any applicable responsible agencies for review and comment. Copies of all correspondence with the responsible agencies shall be submitted to the ERO.

Should the results of the sediment core tests reveal that there has been an appreciable increase in the amount of nitrogen and related compounds in the sediment cores, any necessary measures to remediate such compounds shall be undertaken in accordance with Task 5, below. The SFRPD shall hire a qualified biological/hydrological consultant to prepare a remediation and monitoring plan which shall be submitted to the USFWS and CDFW for review and approval. Copies of all correspondence with the resource agencies shall be submitted to the ERO for review.

5. Remediation

If results of the sediment core chemistry analysis reveal the potential for reduction of sulfate to form hydrogen sulfate, iron sulfides, and its reduction in buffering capacity relative to acid-neutralizing capacity, or if the toxics pathway analysis indicates that their presence could potentially result in substantial stress to special-status species, the SFRPD shall implement remediation measures.

Remediation measures could include, but are not limited to:

- a. Addition of lime to neutralize any acid that exists or which may form during the sediment removal process;
- b. Injection of sodium nitrate to oxidize the sediments, thereby satisfying the sediment oxygen demand; or
- c. Use of suction hydraulic sediment removal that reduces re-suspension of any form of sediments.

Depending on the severity of the condition (e.g., hypoxia), the remediation measure selected for implementation would be the least intensive beginning with Item a, when signs of hypoxia are present, to the most intensive with

Item c, when hypoxia is persistent and/or widespread. The SFRPD shall select the remediation measure in consultation with the USFWS and CDFW. The remediation measure shall be selected based on immediate threats to species and sensitive life stages present during occurrence of the hypoxic condition.

- A worker education program shall be implemented to familiarize workers, including all vehicle operators, of the importance of avoidance of harm to special-status species and the proper protocol should a protected species be encountered. The training shall include a discussion of the importance of maintaining speed limits and respecting exclusion zones. The SFRPD and its construction contractor shall confirm that all workers have been trained appropriately.
- Two weeks prior to the commencement of work activities and immediately prior to commencement of work, a qualified biologist will survey aquatic habitat that is suitable for the California red-legged frog, San Francisco garter snake, and western pond turtle that would be affected by the project. If individuals in any life stages of these species are found, the biologist will contact the USFWS and/or CDFG to determine whether relocating any life stages is appropriate. Collection of California red-legged frogs, San Francisco garter snakes, and western pond turtles would be done with hand nets, and shall be relocated to areas of appropriate habitat;
- Upland vegetation in all construction areas will be progressively cleared by hand equipment to a height of 4 inches and checked for the presence of protected species prior to disturbance and prior to construction equipment or vehicles entering the sites. Once vegetation is cleared, an additional pre-activity survey for the San Francisco garter snake, western pond turtles, and California red-legged frogs will be conducted in the impact area.
- Prior to construction near wetlands or ponds, all rodent burrows in the construction area will be hand excavated until the burrows terminate or to a maximum depth of 30 centimeters in areas where soil or fill will be removed or placed.

Biological Monitor:

- A biological monitor familiar with the identification and life history of California red-legged frog, San Francisco garter snake, western pond turtle, and other potentially present protected species, and with the appropriate agency authorization, shall be designated to periodically inspect onsite compliance with all mitigation measures.
- The biological monitor shall perform a daily survey of the entire project area during construction activities. During these surveys, the monitor shall inspect the exclusion fencing for individuals trapped within the fence and determine the need for fence repair. Throughout the duration of the project, the monitor shall continue to perform daily fence surveys and compliance reviews at the project site. The monitor shall be designated prior to project implementation and shall have at least one specialty environmental monitor on call, with a valid 10(a)(1)(A) permit to handle listed species. The specialty monitor shall direct all personnel in regards to interactions with protected species, perform authorized species relocations, and supervise all reporting on such species.
- Bullfrog monitoring will occur and egg masses detected shall be removed.

During and Post Construction pH Monitoring:

During sediment and vegetation removal in the Laguna Salada Wetland Complex, pH levels immediately above the sediment shall be monitored by the SFRPD to ensure that

implementation of the proposed project would not adversely affect special-status species.¹⁹⁶ To ensure that residual acid sulfates in the water column would not adversely impact special-status species, pH levels in Horse Stable Pond and the connecting channel shall be monitored by the SFRPD for a period of six weeks after the proposed sediment and vegetation removal is completed. A remediation measure, such as addition of lime or injection of sodium nitrate, shall be implemented if the monitoring warrants such a remediation measure to protect special-status species based on the toxicity standards that are established in accordance with Task 4 above.¹⁹⁷

As discussed in Response BI-22, RTC p. 4-411, Draft EIR p. 327, third bullet, is changed as follows:

- During project activities, all trash that could attract nonnative predators would be properly contained, removed from the work site, and disposed of regularly. Following project completion, all trash and construction debris would be removed from work areas.

5.A.9 Section V.H: Hydrology and Water Quality

As discussed in Response HZ-1, RTC p. 4-531, Draft EIR p. 365, second full paragraph, has been changed as follows:

The primary herbicides used by the SFRPD in the Natural Areas are glyphosate (under the trade names ~~Roundup~~, Aquamaster, and Rodeo), imazapyr (Habitat and ~~Polaris~~Stalker), triclopyr (Garlon), and aminopyralid (Milestone). Glyphosate, ~~the primary product used~~, is a broad spectrum, nonselective systemic herbicide that is effective against weeds; it has low toxicity to wildlife but moderate toxicity to fish (Monsanto 2005). ~~Roundup~~ Aquamaster binds tightly to soil, which reduces the potential for migration to surface water or groundwater. Garlon is a selective systemic herbicide that controls broadleaf weeds without harming grasses. ~~Two forms of Garlon~~ are currently available: Garlon 3 and Garlon 4 Ultra. The SFRPD has used Garlon 3 in the past and is currently using Garlon 4 Ultra. Each contains a different form of the active ingredient triclopyr. The form present in Garlon 3 degrades quickly in the environment and has low toxicity to aquatic species (Dow 2009). The active ingredient in Garlon 4 Ultra is triclopyr-2-butoxyethyl ester (BEE). BEE is considered to be highly toxic to fish and aquatic organisms and therefore is not recommended for use in aquatic environments or in proximity to aquatic environments. BEE degrades rapidly (within hours to several days) through exposure to sunlight and by microbial degradation in soils. If applied away from aquatic environments and during dry weather periods, BEE is not expected to pose a significant threat to the environment. Extensive literature is available regarding the use and effects of BEE. Sources include the EPA's Registration Eligibility Decision (RED) document (EPA 1998); the EPA's report on the risks of triclopyr use to red-legged frogs (EPA 2009), and the National Marine Fisheries Service biological opinion on effects of BEE on endangered species (NMFS 2011). A risk assessment for triclopyr prepared for the US Forest Service also contains a detailed literature review (Durkin 2003).

¹⁹⁶ pH is an indicator of anoxic conditions at the sediment-surface water interface. Under anoxic conditions, hydrogen ion availability increases and binds with sulfides mobilized from sediments. Rates of transformation of sulfur are mediated by microorganisms in both the sediments and surface water. Suspension of hydrogen sulfide (H₂S) in the water column is oxidized in surface water to form sulfuric acid (H₂SO₄).

¹⁹⁷ David Munro, Tetra Tech, Inc., Email to Stacy Bradley, SFRPD, Sharp Park Appeal: M-BI-2b – Post Construction Monitoring, January 7, 2014.

~~The SFRPD and the San Francisco Department of Environment are looking at alternatives to Garlon is being phased out from for use in the Natural Areas; however, and is only used for invasive plants in biologically diverse grasslands due to its target specificity. As described in Section III.E.5, only aquatic-specific herbicides, such as Rodeo, Aquamaster, and Habitat would be applied to wetlands and to areas next to water bodies.~~

As discussed in Response BI-7, RTC p. 4-365, Draft EIR pp. 370 to 371, last paragraph, has been changed as follows:

Dredged materials could result in potential impacts on water quality through conversion of the chemical characteristics of the soil after exposure to oxygen. Coastal lagoons, such as Laguna Salada and Horse Stable Pond, are sometimes favorable environments for the accumulation of sulfide minerals from biological decay and lack of oxygen. The sulfides can be converted to sulfuric acid when exposed to atmospheric oxygen by dredging them and placing them on the ground surface. Although not expected to significantly alter surface water pH, acidic soils could have undesirable localized effects on sensitive aquatic habitat. As described in Section III.F.2 (page 99), “Prior to on-site use of dredged material, the sediments to be removed as part of the wetland restoration project would be tested for elevated concentrations of sulfides and other characteristics to determine whether the sediments would serve as soils suitable for supporting desired vegetation. If the sediment proves unsuitable, it would be placed in a nonsensitive location or treated to render it capable of supporting the desired vegetation. Treatment may include spreading and mixing the dredged material with native soil to avoid concentrating acidic soils or adding lime to neutralize acidic soils.” ~~sediments would be tested to determine if elevated concentrations of sulfides are present and if the sediments could serve as soils suitable for supporting desired vegetation. Treatment of acidic soils may include spreading and mixing the dredged material with native soil to avoid concentrating acidic soils, placing the dredged material in a nonsensitive location, or treating the dredged material with lime to neutralize the acid.~~

Environmental effects that could occur from excavating sediments in the presence of acid sulfate soils may include one or more of the following: (1) increase in sulfuric acid; (2) decline in pH; (3) increase in dissolved metal concentrations (aluminum, iron, and arsenic); and (4) increased incidence of hypoxia. Any of the above effects could result in significant impacts (e.g., effects that could jeopardize the continued existence of a population of special-status species or effects to water quality beyond thresholds indicated in state or federal water quality standards).

A literature search indicates that very little research has been done on acid sulfate soils in the San Francisco Bay Area. One case in which acid sulfate soils have arisen as a concern is at the Bair Island tidal marsh restoration area, in Redwood City, California. In that case, the main concern was that sediments that had been excavated and stockpiled for re-use at the site contained sulfides that converted to sulfates as the sediments dried out. Re-use of these materials could result in acidic and hypoxic conditions. Aside from the case above, the literature search did not identify other case studies where acid sulfate soils effects have occurred in Bay Area restoration sites.

Removal of sediment in the connecting channel between Horse Stable Pond and Laguna Salada was reported to have occurred more than 10 years ago. While it was smaller in scale than what is proposed as part of the SNRAMP project, at that time, no effects that would normally be associated with acid sulfate soils, including acidification of waters and sediment surfaces, were identified. Also, at the time of the previous removal, it was reported that the bottom of Horse Stable Pond was lined with gravel. The previous sediment removal activity removed sediments that had accumulated after the seawall was constructed. Because the sediment to be removed as part of the proposed project is likely to have only accumulated since the last removal activity, it is unlikely that acid sulfate soils would exist in the sediments to be excavated. Sources of these sediments

include input from the watershed during storms, as well as accumulated organic matter from dead and decaying vegetation in the watershed complex. This means that these sediments accumulated without the saline conditions that allow acid sulfate soils to form and can be eliminated as a contributor to acid sulfate soils conditions, supporting the conclusion that the proposed sediment and vegetation removal would not likely result in the substantial disturbance of acid sulfate soils in the water column and would not, in turn, result in a significant impact to special-status species.

In summary, other reasons supporting the conclusion that it would be unlikely for hypoxic conditions to occur during the proposed sediment and emergent vegetation removal include the following: (1) when sediment was previously removed from the connecting channel approximately 10 years ago, no effects that would normally be associated with acid sulfate soils, including acidification of waters and sediment surfaces, were identified; (2) the sediment to be removed as part of the proposed project has only accumulated since the last removal activity, which would have removed all the sediment that accumulated before the current seawall was constructed, and, therefore, has accumulated without the saline conditions that allow acid sulfate soils to form; (3) the Biological Opinion for the Pumphouse Project concluded that the project would not jeopardize the continued existence of California red-legged frog or San Francisco garter snake with the implementation of the Conservation Measures included in the Biological Opinion; and (4) in compliance with the Pumphouse project, soil sampling was completed and no acid soil sulfates were found. The same or similar Conservation Measures included in the Pumphouse project Biological Opinion would likely be included in the SNRAMP Biological Opinion as well, or have already been incorporated into the project mitigation measures identified in this EIR.

As discussed in Response BI-7, RTC p. 4-365, Draft EIR p. 372, the following text is added after the third paragraph:

In order to ensure that hypoxic conditions do not materialize and to mitigate such conditions in the unlikely event that they do occur, Mitigation Measure M-BI-6a would be implemented by the SFRPD to reduce the potential for adverse impacts to special-status species as a result of acid sulfate soils and other components by prescribing avoidance measures, pre-construction activities (e.g., worker education program, aquatic habitat surveys, hand-clearing of vegetation, and hand excavation of burrows, sediment core sampling tests, and toxic pathways analysis), remediation activities (if the results of the sediment core chemistry analysis reveals the potential for the reduction of sulfate or if the toxics pathway analysis indicates that their presence could potentially result in substantial stress to special-status species), and monitoring (e.g., biological and pH). Therefore, with implementation of Mitigation Measure M-BI-6a, a *less-than-significant* impact to special-status species (as a result of acid sulfate soil conditions) would occur.

As discussed in Response HY-1, RTC p. 4-486, Draft EIR p. 376, the Impact HY-10 discussion has been changed as follows:

There are no activities included in the project that would significantly alter the drainage pattern of the sites or that would substantially increase runoff such that flooding would occur, with the possible exception of ~~modifying the wetland complex in the proposed restoration activities at Sharp Park~~, as discussed below.

Approximately 15,000 of the 54,000 existing eucalyptus trees in the Sharp Park MA-1 and MA-2 areas would be removed from select areas over time, during the 20-year lifetime of the SNRAMP, to restore native scrub habitats. The proposed tree removals are located on the east side of Highway 101 and are not located near, or part of, the Sharp Park Wetland Complex. Approximately 39,000 invasive trees, including scattered large individual trees, would remain in order to minimize large-scale disturbance and to promote a gradual conversion to native scrub

habitat. No trees would be removed from the MA-3 areas at Sharp Park. Large-scale tree removal activities are described on EIR pages 92 to 93 and 96. As described, large-scale tree removal activities are defined as exceeding 0.5 acre or more on average, or including removal of 20 or more trees at a time. Such removal activities would be conducted in accordance with the practices identified in SNRAMP Appendix F, Urban Forestry Statements. Accordingly, tree removal would either be done in groups or by selective thinning of specific trees. Group selection would remove a number of trees within a relatively small area ranging from 0.25 to 0.5 acre in size. Thinning could be conducted over a much larger area (several acres) and would include removal of smaller trees and saplings with some overstory. Group selection is intended to open up the overstory, while thinning would tend to keep most of the overstory intact, opening up the forest understory. As stated on EIR page 92, trees would be removed limb-by-limb, rather than by felling whole trees (unless tree removal presents a safety concern, which would require felling of the tree). Further, SFRPD would cut the trunk into individual sections, leaving the tree stump and rootball intact to hold the soil and minimize subsurface disturbance. SFRPD would spread tree removal across targeted portions of the Natural Areas and would not concentrate it in any one particular location. The SNRAMP is a 20-year management plan for San Francisco's Natural Areas and, as such, the proposed activities would not occur all at once, but rather over time through the SNRAMP's 20-year management framework.

In addition, as described on EIR page 93, the SNRAMP proposes to use erosion control best management practices (BMPs), which would include use of the following techniques: straw mulch, rolled erosion control products, wood mulch, silt fences, fiber rolls, and straw bales. These erosion control measures would be employed until native vegetation was sufficiently established.

In Sharp Park, removing eucalyptus trees in the upland area would increase incidental rainfall that reaches the ground and could increase the rate of runoff into Sanchez Creek, the main drainage for this watershed. However, the increase is not expected to be substantial in comparison to the size of the drainage area and considering the normal range of runoff volume; additionally, SFRPD would employ low-impact tree removal techniques, remove trees gradually over the 20-year lifetime of the SNRAMP, employ erosion control BMPs and ~~the area would be revegetated~~ revegetate the area following tree removal. Over time, the proposed project would reduce surface runoff by dispersing water more widely over the ground surface and slowing runoff velocities, thereby increasing infiltration.

The rate of runoff from the watershed into Sanchez Creek involves several variables, including the capacity of soils to retain moisture, which is in turn a function of antecedent conditions, the permeability and thickness of the soils, the capacity of the bedrock aquifer to retain water, the slope of the area, the duration and intensity of the storm, the location of the rainfall within the watershed, and other geologic factors. The longer that the rainfall is retained in the upper portions of the watershed, and the more slowly it reaches the creek, the longer the creek can remain at a lower level without flooding. Vegetation cover can slow the rate of runoff, by capturing and retaining some of the rainfall on leaves and in the canopy, and by obstructing overland flow. Vegetation also helps to reduce erosion and retain soils, which in turn retain moisture. Slowing the rate of overland flow allows more time for infiltration of the rainfall into the soil and underlying aquifer. Groundwater flow is many times slower than overland flow.

In a large or intense storm event, however, the ability of water to percolate through soils and fractures in the underlying bedrock is quickly overcome and overland flow becomes the dominant mode of transport of the incident precipitation. The frequency of flooding events can be reduced through improved management of vegetation cover, but in a small, steep watershed such as that of Sanchez Creek, there is limited capacity for retention and large storm events will inevitably lead to downstream flooding despite improvements in vegetation management upstream. The proposed

vegetation replacement and management program would be implemented gradually and is designed to retain ground cover with minimal impact on soil erosion, as described above. Unlike a commercial logging operation, which is designed to remove trees quickly at minimum cost, the vegetation replacement program would establish new vegetation cover to minimize the impact of tree removal.

Much of the flooding that occurs at the Sharp Park Golf Course is not the result of overland flow directly from upland areas, but is caused by waters rising in Laguna Salada because of limits on the pumping rate from Horse Stable Pond. Only larger, longer duration storms cause flooding in Laguna Salada, and because the watershed that drains into Sanchez Creek is much larger than the area affected by the project, the project is not expected to have any significant effect, either beneficial or adverse, on the frequency of flooding in Laguna Salada.

It should be noted that one of the functions of a stream is to transport sediment, and the gradient of a stream adjusts naturally to perform this function. Coastal streams in San Mateo County drain watersheds underlain by weathered and relatively soft and erodible deposits. The coastal hills are steep, and geologically recent, and normal erosion rates are high. The sediments that are carried from these watersheds supply a percentage of the sand that forms the many beaches that are found along the San Mateo County coast. This sediment transport is a natural process that has been impeded by the seawall at Sanchez Creek. Sediment that enters Horse Stable Pond has an opportunity to precipitate rather than be carried out to the ocean by the force of the stream. If an excessive amount of sediment were to be carried into Horse Stable Pond, it would reduce the capacity of the pond, but would not greatly impact the capacity of Laguna Salada.

In addition, to further address the potential reduction of capacity of the pond, the sediment basins would be regularly maintained, which would involve the periodic removal of accumulated sediment. Surveys would be coordinated with the USFWS and CDFG to ensure compliance with endangered species laws and regulations, and wetland functionality would be assessed using ecologically based criteria to determine success of the project objectives.

The SNRAMP includes erosion and sediment control BMPs to be implemented as part of the proposed tree removal and vegetation management activities, and the Sharp Park Restoration Project would be undertaken in compliance with required permits from SFBRWOCB, the CCC, and USACE, which would include additional requirements to protect water quality, special-status species and sensitive habitats from impacts due to erosion and sedimentation. As part of the Sharp Park restoration plan, SFRPD would remove accumulated sediment from Laguna Salada. SFRPD would also construct sediment basins to reduce sediment transport into Laguna Salada and Horse Stable Pond. Therefore, the flooding impacts of the programmatic projects would be *less than significant*. Accordingly, in compliance with CEQA Guidelines Section 15126.4, no mitigation measures are required to address flooding.

As discussed in Response HY-2, RTC p. 4-493, the text on Draft EIR p. 382 (beginning with the first full paragraph) has been changed to reflect the most current guidance relative to sea level rise analysis, as follows (the preceding paragraph, which starts on Draft EIR p. 381, is included for context):

During the 20-year project planning period for the project, the sea level is expected to rise less than one foot. Although sea level rise may continue over time, a sea level rise at India Basin Shoreline Park of less than one foot during the project's 20-year planning period is unlikely to result in significant flooding or salt water intrusion impacts. Similarly, a small rise in sea level is not expected to impact Balboa, which lies inland of the Ocean Beach seawall. An increase in sea level may lead to a rise in regional groundwater levels in the coastal aquifer. The elevation of Lake

Merced would need to rise proportionally to maintain the existing hydraulic balance and barrier to salt water intrusion into the aquifer. There is adequate freeboard above the current lake elevation of Lake Merced to accommodate the anticipated rise in sea level without inducing flooding or increasing potential for salt water intrusion. At Sharp Park, sea level rise would increase the base level elevations of Laguna Salada and Horse Stable Pond. Fresh water must continue to discharge to the ocean underground, and in order for this to happen, the elevation of the water table would rise in proportion to the rise in sea level. The freshwater/saltwater interface, which is a zone of mixing, would move inland somewhat. Salinity in Laguna Salada may increase, especially during dry periods when outflow of fresh groundwater from the watershed above Sharp Park is lowest. The magnitude of sea level rise during the project planning period would probably be too small to result in significant erosion of the sea wall, but the effects are difficult to predict. Higher sea levels will result in faster erosion of the rocky headlands and would probably change the beach profile in front of the sea wall, which in turn may lead to erosion of the foot of the seawall, especially during the winter, when wave runup is greatest and beach sand is normally depleted.

Over a longer term, sea level rise is expected to continue, and could rise to levels that would cause significant impacts. The State of California Sea-Level Rise Guidance Document (most recently updated in March 2013)¹⁹⁸ provides the most current scientific data and guidance for agencies to consider and use during planning and decision making for projects in California. The document was prepared with the understanding that agencies will use the information in a flexible manner, taking into consideration risk tolerances, timeframes, economic considerations, adaptive capacities, legal requirements, and other relevant efforts. For projects in the City and County of San Francisco, sea level rise (or future flood risk) is evaluated on a project-by-project basis considering many of the factors affirmed in the Sea-Level Rise Guidance Document, such as the location of the project, the type of project being proposed, the potential risks to life or property, and adaptive design opportunities or constraints. Because these impacts would be experienced on a regional scale, the efforts to mitigate these impacts would be addressed through future projects on the regional scale.

Among the cumulative effects on water resources of sea level rise are increased frequency of flooding of low-lying areas, increased salt water intrusion in coastal wetlands, increased coastal erosion, and increased potential for contamination of receiving waters because of inundation of areas containing hazardous substances. One approach to mitigating these and similar long-term cumulative effects is to move vulnerable development and activities out of low-lying coastal areas and to encourage coastal and shoreline uses, such as open space, that can accommodate sea level rise. In general, Natural Areas are expected to have ~~low~~ less-than-significant impacts on water resources and therefore are not expected to contribute to the cumulative impacts on water quality that may result from sea level rise, resulting in a less than cumulatively considerable (less than significant) contribution to sea level rise impacts.

¹⁹⁸ Coastal and Ocean Working Group of the California Action Team with science support provided by the Ocean Protection Council's Science Advisory Team and the California Ocean Science Trust, State of California Sea-Level Rise Guidance Document, March 2013 Update. This document is available online at: http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwiN7JLh15bNAhVJ02MKHdcID_IQFggfMAA&url=http%3A%2F%2Fwww.opc.ca.gov%2Fwebmaster%2Fftp%2Fpdf%2Fdocs%2F2013_SLR_Guidance_Update_FINAL1.pdf&usg=AFQjCNEf_tyvfPAk598V6HaLMakH0WC0MA&sig2=-MzpJagnGF89COfkEvk1xQ&bvm=bv.124088155,d.cGc, accessed on June 7, 2016.

5.A.10 Section V.I: Hazards and Hazardous Materials

As discussed in Response HZ-1, RTC p. 4-531 and Response HZ-2, RTC p. 4-544, Draft EIR p. 386, after the first full paragraph, the following text is added:

San Francisco's IPM Program maintains a Reduced Risk Pesticide List that is updated annually. It is a list of the only pesticides approved for use on City-owned property without an approved exemption. In addition to an initial screening by the EPA, each pesticide on the list goes through a four-step screening process prior to being added to the list:

1. First, it is screened using the San Francisco Pesticide Hazard Screening Protocol, which is available on the San Francisco Department of the Environment's website at <http://sfenvironment.org/article/pest-management/managing-pests-on-City-properties>. This screening includes a hazard assessment and an exposure assessment.
2. Second, it is reviewed by the San Francisco IPM Technical Advisory Committee, which is composed of City IPM Coordinators, contractors, IPM specialists from non-City agencies, and other interested parties. Each year, the committee considers product hazards, potential for exposure, data gaps, and existence of safer alternatives before placing products on the Reduced Risk Pesticide List.
3. Third, it is presented at a public hearing, where the public is invited to comment.
4. Finally, the Commission on the Environment approves or rejects its inclusion on the Reduced Risk Pesticide List.

City Departments must request a temporary exemption in order to use a pesticide that is not on the San Francisco Department of the Environment's current Reduced Risk Pesticide List. Each request for exemption must contain a written justification that is thoroughly reviewed by the San Francisco Department of the Environment, which will only grant exemptions when there is a well-documented need for the pesticide and when all other alternatives have been tried and deemed impractical or for the trial use of new reduced risk products. If the exemption is approved, any limitations necessary to protect public health and safety and the environment are detailed. Typical limitations include the date range, location, and methods of application that are approved. Pesticide applications covered by an approved exemption are not considered violations of the IPM Ordinance.

As discussed in Response HZ-1, RTC p. 4-531, and to further clarify the intent of the SNRAMP with respect to the use chemical control methods, the text on Draft EIR p. 386 (after the "Vegetation Control" heading) has been changed, as follows:

Current management methods used in the Natural Areas Program include the following:

- Physical control methods employed by Natural Areas Program staff and volunteers, which range from hand-pulling weeds to the use of hand and mechanical tools to uproot, girdle, or cut plants;

- ~~Biological~~ Pest control,¹⁹⁹ which, in the case of the Natural Areas Program, involves revegetating cleared areas and introducing native plants in an area to encourage competition with weeds;
- Chemical control, which involves the use of herbicides to suppress wildland weeds, in compliance with the San Francisco Pest Management Ordinance; and
- Treatment of tree stumps with San Francisco-approved pesticides (such as Roundup and Garlon); and
- ~~Public education and outreach.~~

As discussed in Response BI-5, RTC p. 4-358 and Response HZ-3, RTC p. 4-545, Draft EIR p. 387, last paragraph, has been changed as follows:

The SFRPD used to maintain a rifle range in Sharp Park. This facility has been closed for over 13 years. Located near the archery club, this facility is outside of the Natural Areas at Sharp Park. A soil and groundwater investigation identified the presence of lead, polycyclic aromatic hydrocarbons, antimony, and arsenic in soil in an area covering approximately 4 acres; groundwater was not impacted (DTSC 2009). The Department of Toxic Substances Control issued a Notice of Exemption on August 5, 2009, for the removal action work plan for consolidation of lead-contaminated soil at the former Sharp Park Rifle Range. Implementation of the work plan involves the excavation of approximately 12,000 to 16,000 cubic yards of contaminated soil, which would be placed on-site and covered with imported clean soil (DTSC 2009). These cleanup and remediation activities ~~have been~~ were completed in January 2011. Contaminated soil in the area was excavated, consolidated onto a 1.35-acre portion of the site, and covered with 2 feet of clean soil to prevent exposure to contaminants. SFRPD will continue to monitor and periodically report to the Department of Toxic Substances Control on the effectiveness of this corrective action.

As discussed in Response HZ-3, RTC p. 4-545, Draft EIR p. 387, following the last paragraph, the following text is added:

The San Francisco Public Utilities Commission (SFPUC) has completed the Pacific Rod and Gun Club Upland Soil Remedial Action Project, which included the remediation of upland²⁰⁰ soil contamination at the former Pacific Rod and Gun Club (PRGC) site in compliance with RWQCB Order No. R2-2013-0023. The site is located on the southwest side of Lake Merced. The City and County of San Francisco own the approximately 10-acre property, which is managed by SFPUC. SFPUC had leased the site to the PRGC, which had built and operated skeet and trap shooting facilities there since 1934.

On March 4, 2016, final site inspections were conducted with respect to the completion of the remediation project; however, the Contractor is still maintaining the newly planted vegetation, and restored wetlands and is also required to ensure that the site is stable with respect to stormwater management before the project is deemed entirely complete.

¹⁹⁹ Pest control generally involves the management of pests (insects, diseases, weeds) by manipulation of the environment or implementation of preventive practices including using plants that are resistant to pests, raising the mowing height of turf to shade out weeds, aerating turf to reduce compaction and plant stress, or dethatching to remove habitat, food sources and impediments to management.

²⁰⁰ Upland refers to the elevated areas lying above the level where water flows or where flooding occurs.

In completing the remediation aspects of the project, the following objectives have been achieved:

- Achieve the highest cleanup standards to minimize the risk of human exposure to elevated concentrations of lead, PAHs, and arsenic in site soils; this would avoid restrictions on site use and additional ongoing monitoring and maintenance requirements
- Reduce the potential for leaching of contaminants into Lake Merced

A Final Mitigation Negative Declaration (Case No. 2013.1220E) was published on October 23, 2014, which indicated that all impacts would be less than significant or mitigated to a less-than-significant level.

As discussed in Response HZ-1, RTC p. 4-531, Draft EIR p. 391, before the last paragraph, the following text is added:

The amount and frequency of pesticide applications as a result of implementation of the SNRAMP would be similar to what currently occurs within the NAP areas and what has occurred over the past 10 years. Although it will sometimes be necessary to treat vegetation with pesticides containing active ingredients such as glyphosate, triclopyr, imazapyr, and aminopyralid after removal, vegetation removal activities would occur gradually over time (over 20 years). Pesticide use would fluctuate from year to year, as it does now, for multiple reasons, including the vegetation to be removed, the timeframe of those projects, weather, and the number and types of pests present.

As discussed in Response HZ-1, RTC p. 4-531, Draft EIR p. 392, lines 26 to 29, has been changed as follows:

Further, the Natural Areas Program would use pesticides that are the least toxic option that effectively controls the weeds. Because the application of herbicides are applied following IPM guidance, as well as the fact that staff remain onsite until the application has dried and it is safe to re-enter the area, dogs that are walked on leash as required by SFRPD rules would not risk an unsafe level of exposure to herbicides.

~~Therefore, For the reasons stated above,~~ impacts from applying herbicides as part of the IPM for programmatic projects under the SNRAMP would be *less than significant*.

As discussed in Response HZ-4, RTC p. 4-557, Draft EIR p. 396, line 28, to Draft EIR p. 397, line 1, has been changed as follows:

Also, implementing recommendation GR-13a would reduce the presence of vegetation with high fire hazard ratings, ~~such as dense and aging French broom and eucalyptus,~~ adjacent to homes and other structures. Recommendation GR-13a further states that, when possible, minimum fire reduction zones of 30 feet should be maintained. Also, no brush piles shall be created within fire reduction zones. Trees determined to be hazardous to adjacent homes by the SFRPD Arborist should be removed. Tree and invasive weed removal ~~would~~ could reduce the amount of available fuel for fires. More important, timber thinning would increase the space between trees, reducing the ability of a fire to rapidly spread in some instances.

As discussed in Response HZ-4, RTC p. 4-557, Draft EIR p. 397, the sentence beginning on line 7 has been changed as follows:

As Sharp Park and a few Natural Areas within San Francisco are classified as moderate to high fire hazard zones, tree and invasive weed removal as part of the programmatic projects would reduce the available fuel loads and could reduce the potential of fire hazards within these areas.

As discussed in Response HZ-4, RTC p. 4-557, Draft EIR p. 397, lines 18 to 21, has been changed as follows:

Similar to the impacts described under the programmatic projects, routine maintenance activities that remove fuel loads would ~~could~~ reduce the presence of vegetation with high fire hazard ratings, such as dense and aging French broom and eucalyptus. Therefore, tree and invasive weed removal ~~would~~ could reduce the amount of available fuel for fires.

5.A.11 Section V.J: Agriculture and Forest Resources

As discussed in Response HZ-4, RTC p. 4-557, Draft EIR p. 410, beginning with line 15, has been changed as follows:

Among the objectives of the recommended actions at Mount Sutro are replacing ~~highly flammable~~ eucalyptus trees with more fire resistant species, increasing age diversity of trees, and improving the health and safety of the remaining trees.

As discussed in Response LU-4, RTC p. 4-216, Draft EIR p. 410, line 20, has been changed as follows:

Further, San Francisco landmark, significant, and street trees are protected by the San Francisco Urban Forestry Ordinance, which requires the replacement of removed trees on a one-to-one basis.

5.A.12 Chapter VI: Other CEQA Issues

As discussed in Response G-15, RTC p. 4-65, Draft EIR p. 444, line 6, has been changed as follows:

Fort Funston, located approximately 8,000 feet (about 1.5 miles) from the existing Lake Merced DPA has approximately ~~200~~ 160 acres open for off-leash dog use.

As discussed in Response NO-1, RTC p. 4-281, Draft EIR p. 445, first full paragraph, has been changed as follows:

Tree removal at Mount Davidson would be to the west and south of Juanita Way and would not increase the noise exposure of the residences along Juanita Way from Portola Drive. The existing noise levels within the interior of the park, where most tree removal activities would be conducted, are generally below 55 L_{dn}.^{201, 202} According to the San Francisco General Plan's Land Use

²⁰¹ Average noise exposure over a 24-hour period is often presented as a day-night average sound level (L_{dn}).

²⁰² San Francisco Planning Department, San Francisco General Plan, Environmental Protection Element, Map 1, Background Noise Levels. This document is available online at www.sfplanning.org, accessed on January 18, 2013.

Compatibility Chart, noise levels below 70 L_{dn} are acceptable for parks and playgrounds.²⁰³ Alterations to the forest canopy would not be sufficient to substantially increase permanent ambient noise levels within Mount Davidson, and would not result in unacceptable noise levels for park users. Therefore, removal of the trees at Mount Davidson would not expose ~~the nearby residences~~ noise-sensitive receptors to new, long-term noise sources.

As discussed in Response GG-1, RTC p. 4-297, Draft EIR p. 455, starting on line 11, has been changed as follows:

Increased GHG emissions occur as a result of increased heavy-duty vehicle and equipment associated with construction activities. During the 5.5-month construction period, the Sharp Park wetland restoration project would emit 21,777 lbs per day of CO₂e, which is equivalent to a total of 1,630 metric tons of CO₂e. ~~Because BAAQMD's 2011 CEQA Air Quality Guidelines do not define a project-level GHG threshold for construction-related emissions, there is no applicable significance threshold to which to compare this estimate~~ but these emissions are commonly addressed in a CEQA analysis by amortizing them over the lifetime of a project and adding them to operational emissions. Using the 20-year window of the Management Plan as the lifetime of the proposed project, annualized emissions from construction would be approximately 81.5 metric tons of CO₂e per year.²⁰⁴ When these emissions are added to those of the sequestration change, the proposed project would still have a less-than-significant impact with regard to GHG emissions. Thus, GHG emissions of the Sharp Park restoration would result in a less than significant impact. When the annual 81.5 metric tons of CO₂ emissions from construction are subtracted from the net sequestration gain resulting from the tree plantings with the project (202 MT of CO₂ per year), the project still results in a net sequestration gain. The Sharp Park restoration is considered the largest of the programmatic projects. Therefore, GHG emissions resulting from other individual programmatic projects in the Sharp Park Natural Area are expected to be less than those resulting from the restoration project.

²⁰³ San Francisco Planning Department, *San Francisco General Plan*, Environmental Protection Element. This document is available online at www.sfplanning.org, accessed on January 18, 2013.

²⁰⁴ The proposed activities for the Sharp Park restoration include the use of heavy equipment for creating shallow pools within the existing wetlands, dredging excess sediments, and grading to prevent flooding. GHG emissions resulting from the Sharp Park restoration were calculated using URBEMIS. The URBEMIS model was populated with assumptions regarding timing of restoration activities and the number, type, and operating hours of equipment as specified by the project sponsor. The model returns the CO₂ emission rates for all equipment, deliveries, and worker activity involving on-road and off-road gasoline and diesel fuel use. Other GHGs, such as methane and nitrous oxide rates, are assumed to comprise 95 percent of CO₂e emissions. In addition, this analysis assumed that all heavy duty construction equipment is diesel or gasoline powered and no substantial electrically powered pieces of construction equipment would be used, based on the project description. The results indicate that approximately 21,777 pounds per day of CO₂e would be emitted during the implementation of these activities. During the 5.5-month construction period, the Sharp Park wetland restoration project would emit 21,777 lbs per day of CO₂e, which is equivalent to a total of 1,630 metric tons of CO₂e. These emissions were annualized over the 20 year implementation period of the SNRAMP to come up with 81.5 metric tons of CO₂e per year, calculated as 1,630 metric tons of CO₂e divided by 20 years.

As discussed in Response GG-1, RTC p. 4-297, Draft EIR pp. 456 to 457, starting with the last paragraph, have been changed as follows:

As trees die and decay, they release much of the stored carbon to the atmosphere. Thus, carbon storage is an indication of the amount of carbon that can be lost if trees are allowed to die and decompose. Of all the species in San Francisco, eucalyptus trees store and sequester the most carbon (approximately 24.4 percent of the total carbon stored and 16.3 percent of all sequestered carbon). Trees removed in the Natural Areas in San Francisco would be replaced at a one-to-one ratio, although not necessarily in the same location. Eucalyptus trees would be replaced with native trees. ~~Although the net effect on carbon sequestration capacity is unknown for the proposed replacement of mature eucalyptus with native saplings, replacing dying trees with healthy trees typically enhances the carbon sequestration process. In fact, one of the urban forest management strategies to help improve air quality is to increase the number of healthy trees. Further, among mitigation measures recommended by the Intergovernmental Panel on Climate Change is forest management, and particularly selection of tree species that sequester the most carbon (IPCC 2007). As such, tree replacement is expected to result in a net increase in the amount of carbon sequestered within the Natural Areas. The total number of trees would not change within the Natural Areas of San Francisco and the amount of carbon sequestered would increase in the long term from replacing dead, dying, or diseased trees. According to the California Registry, dead trees must be replaced within one year of removal. This timeframe allows for planting to occur at the appropriate time of the year. Therefore, the project would not conflict with San Francisco's Greenhouse Gas Ordinance. Further, the project would not conflict with California's goal of reducing GHG emissions set forth by the timetable established in AB32²⁰⁵. Therefore, the proposed project would result in less than significant individual and cumulative impacts from GHG emissions and the associated carbon sequestration impacts. An analysis drawing from a number of resources to quantify anticipated CO₂ sequestration gains and losses was prepared for the SNRAMP Project. These sources include the Urban Forestry Carbon Sequestration Workbook published by the U.S. Department of Energy,²⁰⁶ the Center for Urban Forest Research Tree Carbon Calculator published by the U.S. Forest Service (USFS),²⁰⁷ the *Good Practice Guidance for Land Use, Land Use Change and Forestry* published by the International Panel on Climate Change (IPCC),²⁰⁸ and the CalEEMod supporting calculations.²⁰⁹~~

Trees have a relatively high rate of CO₂ sequestration potential. However, while the sequestration rate increases over a period of time (assumed to be approximately 20 years, based on professional practice), after that point the accumulation of carbon in biomass slows with age, and eventually is

²⁰⁵ In 2006, the California legislature passed Assembly Bill No. 32 (California Health and Safety Code Division 25.5, Sections 38500, et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 requires ARB to design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions).

²⁰⁶ U.S. Department of Energy, *Urban Forestry Carbon Sequestration Workbook*, 2007.

²⁰⁷ U.S. Forest Service, *Urban Forest Research Tree Carbon Calculator*, 2005. This document is available online at <http://www.fs.usda.gov/ccrc/tools/tree-carbon-calculator-ctcc>, accessed on June 7, 2016.

²⁰⁸ International Panel on Climate Control, *National greenhouse Gas Inventories Programme, Good Practice Guidance for Land Use, Land Use Change and Forestry*, 2003. This document is available online at: http://www.ipcc-nggip.iges.or.jp/public/gpplulucf/gpplulucf_files/GPG_LULUCF_FULL.pdf, accessed on June 7, 2016.

²⁰⁹ SCAQMD, *CalEEMod Appendix A*, 2011.

completely offset by losses associated with tree clipping, pruning, and occasional death (IPCC 2003). Sequestration rates for grasslands and herbaceous plants, which grow quickly, were assumed to be static. This analysis applied tree age for Blue Gum (eucalyptus trees would be the predominant species removed, and all are assumed to be blue gum) provided by the SFRPD to determine increases and losses in CO₂. The Urban Forestry Carbon Sequestration Workbook was used to estimate increasing carbon sequestration of new tree plantings over a 20-year period. The Tree Carbon Calculator from the USFS was used as a source of sequestration rates for specific tree types to be removed as provided by the SFRPD.²¹⁰ The CalEEMod supporting documentation provided the sequestration rates for grasslands.

The following discussion shows sequestration losses and gains from implementation of two distinct activities: (1) implementation of a tree replacement program in San Francisco (Table 19A); and (2) replacing existing trees with native grasses in Sharp Park in Pacifica (Table 19B).

While these tables represent distinct activities, the total project beneficial impact would be the sum of these two contributions, which shows a net sequestration gain at the end of the 20-year program of 202 metric tons of CO₂e per year (calculated as 138 metric tons of CO₂e per year [Table 19A] plus 64 metric tons of CO₂e per year [Table 19B]).

Sequestration Losses and Gains from Tree Replacement in San Francisco

Data provided indicate that 3,448 trees would be removed from the Natural Areas in San Francisco (not including Sharp Park) over a 20-year period. While six species of trees were identified for removal, species-specific sequestration rates could not be identified for four of these species. However, the remaining two species (eucalyptus and pine) comprise over 96 percent of the trees to be removed. Consequently, sequestration rates for the remaining species were assigned to the known sequestration rates equally. Based on field data estimates provided by Hort Science,²¹¹ approximately 2,942 of these trees to be removed are Blue Gum trees greater than 20 years of age for which sequestration has been slowed and is assumed by IPCC Good Practice²¹² to be offset by maintenance and mortality. Loss of sequestration from trees to be removed in San Francisco is presented in Table 19A.

Over the same 20-year period that trees would be removed, new tree plantings would occur. These trees were assumed, based on data provided, to largely consist of California Live Oak. Consequently, these trees were assigned to the “medium hardwood” category in the Urban Forestry Carbon Sequestration Workbook. Carbon sequestration increases over time from replanting 3,448 trees are also presented in Table 19A.

Table 19A
CO₂ Sequestration Losses and Gains from Tree Removal and Planting in San Francisco

<u>Tree Removal – San Francisco</u>	<u>Estimated CO₂ Losses (-) and Gains (+)</u>
<u>Annual sequestration loss (over 20 years)</u>	<u>- 54 Metric Tons (MT) CO₂/year</u>

²¹⁰ San Francisco Recreation and Park Department, Memorandum to Jessica Range of San Francisco Environmental Planning, November 27, 2012.

²¹¹ Hort Science, Memorandum to Jessica Range, January 17, 2013.

²¹² International Panel on Climate Control, National greenhouse Gas Inventories Programme, Good Practice Guidance for Land Use, Land Use Change and Forestry, 2003.

<u>Tree Plantings – San Francisco</u>	<u>Estimated CO₂ Losses (-) and Gains (+)</u>
<u>Annual sequestration gain (year 20)</u>	<u>+ 192 MT CO₂/year</u>
<u>Net sequestration gain at end of 20-year program</u>	<u>+ 138 MT CO₂/year</u>

Sequestration Losses and Gains from Tree Removal and Grassland and Scrub placement in Sharp Park

Data provided indicate that 15,000 trees would be removed in Sharp Park (separate from the 3,448 removed in the San Francisco Natural Areas) over a 20-year period. These tree species are almost entirely eucalyptus. Based on field data estimates provided by Hort Science,²¹³ approximately 13,500 of these trees to be removed are Blue Gum trees greater than 20 years of age for which sequestration has been slowed and is assumed by IPCC Good Practice to be offset by maintenance and mortality. Loss of sequestration from trees to be removed at Sharp Park is presented in Table 19B.

Over the same 20-year period that trees would be removed from Sharp Park, trees would be replaced with native grassland and coastal scrub. Replacement vegetation was assigned a grassland sequestration rate as provided by CalEEMod. A specific sequestration rate for coastal scrub was not available; thus, all 56 acres of replaced vegetation were assumed to be grassland for purposes of calculation. Carbon sequestration associated with planting approximately 56 acres of grasslands is also presented in Table 19B.

Table 19B
CO₂ Sequestration Losses and Gains from Tree Removal and Grassland Planting in Sharp Park (in Pacifica)

<u>Tree Removal – Sharp Park</u>	<u>Estimated CO₂ Losses (-) and Gains (+)</u>
<u>Annual sequestration loss (over 20 years)</u>	<u>- 177 MT CO₂/year</u>
<u>Grassland Plantings – Sharp Park</u>	<u>Estimated CO₂ Losses (-) and Gains (+)</u>
<u>Annual sequestration gain (year 20)</u>	<u>+ 241 MT CO₂/year</u>
<u>Net sequestration gain (after 20 years)</u>	<u>+ 64 MT CO₂/year</u>

Net Sequestration Changes Associated with the Implementation of the SNRAMP

At the end of the 20-year horizon window of the SNRAMP, there would be a calculated total net sequestration gain of approximately 202 MT of CO₂ per year, as indicated in Tables 19A and 19B. The primary contributing factor to this sequestration gain would be the removal of an aging eucalyptus tree population which would be replaced with much more efficiently sequestering tree and plant growth.

Trees removed in Sharp Park would be replaced with native grassland and scrub species. The California Registry is developing flexible mechanisms to address reversals if removed trees are not compensated by planting replacement trees. According to a study presented at the American Geophysical Union’s meeting, grasslands above 50 degrees latitude reflect more sun than forest canopies, thereby keeping temperatures lower by an average of 0.8 degree Celsius (Jha 2006). However, in the tropics, forests cool the planet by an average of 0.7 degree Celsius (Jha 2006).

²¹³ Hort Science, Memorandum to Jessica Range, January 17, 2013.

~~Research studies have concluded that grassland and scrub habitat could act as a significant carbon sink (Hu et al. 2001; Conant et al. 2001). Therefore, replacing the trees to be removed in Sharp Park with grassland and scrub habitat would not result in a substantial increase in GHG emissions from the loss of CO₂ sequestration, and impacts from GHG emissions would be less than significant.~~

Consequently, using standard practice methodologies for assessing GHG impacts relative to CEQA, the proposed project would have a net GHG benefit and would not conflict with California's goal of reducing GHG emissions set forth by the timetable established in AB 32.²¹⁴ Therefore, the proposed project would result in less-than-significant individual and cumulative impacts from GHG emissions and the associated carbon sequestration impacts.

As discussed in Response GE-2, RTC p. 4-474, Draft EIR p. 460, last paragraph, has been changed as follows:

In addition to these BMPs, ~~additional~~ practices outlined in the SNRAMP specifically designed to minimize erosion include removing only small areas of vegetation at any one time (GR-1c), and, to the extent possible, performing work that involves exposure of large areas of soil during the dry season (GR-12b). As further described in the SNRAMP, the Natural Areas at Grandview Park, Rock Outcrop, Golden Gate Heights Park, and Hawk Hill belong to a remnant ridge-top sand dune system in the western portion of San Francisco. Areas of exposed sand in these parks are subject to erosion due to wind, runoff, and foot traffic on social trails established on steep slopes. The proposed management actions in these Natural Areas, including removal of iceplant and other nonnative vegetation, would be undertaken in a manner to reduce and control erosion. For example, Recommendation GGRH-1f specifies that: "[i]n areas where large-scale removal of invasive vegetation could lead to increased soil erosion (removal of iceplant at Hawk Hill, for example), the vegetation removal shall only occur in small, non-adjacent patches. Currently, herbicides are being applied in this manner to small patches of iceplant at Hawk Hill. Once the iceplant dies it shall be left in place to retain the sandy soils while native species recolonize the area." Removal of nonnative trees would be limited in these natural areas to approximately five trees from the upper slope at Grandview Park. Implementation of Recommendation GGRH-1e would help to stabilize sandy soils and prevent and control erosion due to wind and runoff by maintaining and enhancing native dune scrub vegetation at each of these four Natural Areas. Revegetation following removal of invasive plant species along with the installation of erosion control measures in the BMPs described above would help control erosion.

The SNRAMP also includes proposed management actions to reduce erosion in these natural areas due to foot traffic on social trails. The proposed actions include the use of signage and fencing to discourage use of social trails on steep erodible slopes at each of these Natural Areas, installation of timber steps (similar to the "sand ladder" at Baker Beach) at Hawk Hill, and installation of soil retaining boxes on the downhill side of the landings to minimize erosion at Grandview Park. None of the geology and soils effects ~~were was~~ found to be significant.

²¹⁴ In 2006, the California legislature passed Assembly Bill No. 32 (California Health and Safety Code Division 25.5, Sections 38500 et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 requires ARB to design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions).

5.A.13 Chapter VII: Alternatives

As discussed in Response BI-17, RTC p. 4-406, Draft EIR p. 466, eleventh bullet, has been changed as follows:

- Cooperate with other agencies to address issues of such species as feral cats, domestic dogs, and ~~feral geese~~²¹⁵

As discussed in Response AL-7, RTC p. 4-572, Draft EIR p. 498, beginning with line 11, has been changed as follows:

However, under this alternative, Natural Areas Program staff would continue routine maintenance, which would ensure that the physical deterioration of recreation facilities (trails, DPAs, and other facilities) would ~~not be substantially degraded~~ be avoided."

As discussed in Response G-13, RTC p. 4-62, Draft EIR p. 527, first paragraph, has been changed as follows:

As part of the Sharp Park Conceptual Restoration Alternatives Report, the SFRPD ~~proposed~~ identified restoration alternatives that would be compatible with either a nine-hole layout at the Sharp Park Golf Course or with removal of the golf course entirely. These alternatives have been rejected because they are not compatible with the existing and ~~planned~~ continued 18-hole layout of the historic golf course.

5.B STAFF-INITIATED CHANGES

The following changes to the text of the Draft EIR are those required beyond the changes made in RTC Section 5.A, Changes in Response to Comments. Formatting of these changes has been done in the same manner described in Section 5.A.

5.B.1 Global Changes

On the cover and throughout the document, "Case No. 2005.1912E" has been changed to "Case No. 2005.0912E."

5.B.2 Section V.B: Project Description

The text provided in the last paragraph beginning on Draft EIR p. 99 has been changed as follows:

Some areas that are currently open water within Laguna Salada and Horse Stable Pond would be deepened by one to three feet, and parts of the eastern portions of the lagoon and pond shorelines, as well as the connector channel, would be excavated to restore open water habitat and to ensure that ample edge habitat consisting of open water/emergent vegetation interface would persist for the foreseeable future. Excavation of accumulated sediments and encroaching wetland plants would result in the conversion of vegetated wetlands to open water habitat. This deepening would be conducted using excavating equipment positioned along the shore of the two water bodies. Up

²¹⁵ Geese in San Francisco are not feral; however, they were incorrectly identified as feral in the 1995 SNRAMP.

to 60,000 cubic yards of material would be excavated; of this, approximately 40,000 cubic yards would be used on site and approximately 20,000 cubic yards would be stockpiled or spread at the Sharp Park rifle range site or disposed of at the Sharp Park organic dump. Excavated dredge spoils appropriate for use as golf course substrate materials would be used on site to raise the elevation of Holes 10, 14, 15, and 18 and to create the upland habitat on the east edge of Laguna Salada. Prior to on-site use of dredged material, the sediments to be removed as part of the wetland restoration project would be tested for elevated concentrations of sulfides and other characteristics to determine whether the sediments would serve as soils suitable for supporting desired vegetation. If the sediment proves unsuitable, it would be placed in a non-sensitive location or treated to render it capable of supporting the desired vegetation. Treatment may include spreading and mixing the dredged material with native soil to avoid concentrating acidic soils or adding lime to neutralize acidic soils. Excavated dredged soils appropriate for on-site reuse would be used to create upland habitat on the east edge of Laguna Salada. Any additional sediment would be re-used at non-sensitive locations, which include the Sharp Park Rifle Range, the Sharp Park green waste facility, and the Sharp Park golf course in locations where the character-defining features of the course would not be adversely impacted. Excavation of the eastern portions of the lagoon, pond and the connector shoreline would convert up to six acres of freshwater marsh, willow scrub, and wet meadow wetland habitat to open water habitat.

The text provided in the last bullet on Draft EIR p. 105 has been changed as follows:

- While General Recommendation GR-8b of the SNRAMP mentions consideration of new dog play areas (DPAs), no new DPAs are proposed as part of the project, ~~due to the current moratorium on new DPAs;~~²¹⁶

The text provided in the fifth bullet on Draft EIR p. 110 has been changed as follows:

- GR-8b—Match on-leash and off-leash dog use with the sensitivity of the habitat when considering new DPAs within or next to Natural Areas;

(Note: ~~An underlying assumption of this EIR is that there would be no new DPAs because there is~~ The Draft EIR conservatively characterized the direction from the Recreation & Park Commission concerning establishment of new DPAs as not to establish new DPAs until systemwide DPA planning is completed. For the purposes of this EIR, this is considered a moratorium for the purpose of analyzing cumulative impacts in the Natural Areas in that no new DPAs are reasonably foreseeable. This direction was ~~announced~~ presented at the October 10, 2006, meeting of the San Francisco Dog Advisory Committee; addressed in a July 19, 2007, SFRPD memorandum on the Status of the Dog Advisory Committee Work Plan; and discussed during the August 16, 2007, meeting of the San Francisco Recreation & Park Commission. New

²¹⁶ The Draft EIR conservatively characterized the ~~There is~~ direction from the Recreation & Park Commission not to concerning establishment of establish new DPAs as until systemwide DPA planning is completed. For the purposes of this EIR, this is considered a moratorium for the purpose of analyzing cumulative impacts in the Natural Areas in that no new DPAs are reasonably foreseeable. This direction was ~~announced~~ presented at the October 10, 2006, meeting of the San Francisco Dog Advisory Committee; addressed in a July 19, 2007, SFRPD memorandum on the Status of the Dog Advisory Committee Work Plan; and discussed during the August 16, 2007, meeting of the San Francisco Recreation & Park Commission. New or improved DPAs may be pursued in San Francisco by the SFRPD and/or through community-driven efforts; however, none are proposed or envisioned in the Natural Areas. For the purposes of this EIR, it is assumed that no new DPAs are reasonably foreseeable to provide a worst-case analysis.

or improved DPAs may be pursued in San Francisco by the SFRPD and/or through community-driven efforts; however, none are proposed or envisioned in the Natural Areas. Should new DPAs be proposed at some point, the appropriate level of CEQA analysis would be undertaken, and applicable permits and other regulatory agency approvals would be obtained.)

As discussed in Response AE-1, RTC p. 4-220, a footnote has been added to Table 5 on Draft EIR p. 114 to indicate that the replacement locations have not yet been determined. In addition, Table 5 has also been revised to indicate the reduction in the size of the McLaren Park Natural Area:

**Table 5
Summary of Natural Areas Management Plan**

Natural Area Site	Park Acreage	Natural Area Acreage*	Management Area (acres)				Invasive Trees			Trails (feet)				Dog Play Areas (acres)			
			MA-1	MA-2	MA-3	Total MA ¹	Existing	To Remove	To Remain	Existing	To Close/ Relocate	To Create	Resulting	Existing	To Remove	To Remain	Monitor**
Balboa	1.8	1.8	1.1	0.7	0	1.8	0	0	0	637	90	0	547				
Bayview Park	43.9	43.9	8.2	15.8	19.7	43.7	6,000	511	5,489	8,496	1,439	1,020	8,077				
Bernal Hill	24.3	24.3	7.6	5.8	10.7	24.1	100	0	100	12,239	4,544	464	8,159	21.0	6.0	15.0	No
Billy Goat Hill	3.5	3.5	0.6	1.1	1.6	3.3	20	0	20	2,600	745	0	1,855				
Brooks Park	3.5	2.0	0.8	0.9	0.3	2.0	20	3	17	1,340	456	0	884				
Buena Vista Park	36.1	6.1	0	6.1	0	6.1	140	10	130	3,741	0	0	3,741	1.0	0	1.0	Yes
Corona Heights	12.6	9.6	2.9	2.5	4.2	9.6	200	15	185	6,701	1,845	0	4,856	0.4	0	0.4	No
Dorothy Erskine Park	1.5	1.5	0.2	0.3	1.0	1.5	100	14	86	771	0	0	771				
Duncan-Castro	0.5	0.5	0.3	0.1	0.1	0.5	0	0	0	333	0	0	333				
Edgehill Mountain	2.3	2.3	0	0.9	1.4	2.3	300	0	300	747	0	438	1,185				
Everson/Digby	1.2	1.2	0.9	0.1	0.2	1.2	0	0	0	0	0	0	0				
Fairmount Park	0.7	0.7	0	0	0.7	0.7	100	0	100	187	0	0	187				
Glen Canyon Park and O'Shaughnessy Hollow***	72.6	63.8	8.1	33.0	22.4	63.5	6,000	120	5,880	23,242	3,653	0	19,589				
Golden Gate Heights	6.0	0.8	0.2	0.5	0.1	0.8	30	0	30	559	390	188	357				
Golden Gate Park Oak Woodlands	1,021.0	26.2	0.7	25.5	0	26.2	900	82	818	24,844	12,381	0	12,463	2.8	0	2.8	Yes
Grandview Park	4.0	4.0	0.9	2.4	0.7	4.0	25	5	20	1,722	409	0	1,313				
Hawk Hill	4.5	4.5	1.4	3.0	0	4.4	10	0	10	1,609	692	0	917				
India Basin Shoreline Park	11.8	6.2	3.2	2.8	0	6.0	0	0	0	1,885	0	0	1,885				
Interior Greenbelt	19.4	16.5	0	1.8	14.7	16.5	5,800	140	5,660	935	0	620	1,555				
Kite Hill	2.7	2.7	0.6	0.5	1.6	2.7	10	0	10	1,957	398	0	1,559				
Lake Merced	614.0	395.0	60.8	101.8	231.5	394.1	12,000	134	11,866	11,106	3,319	365	8,152	5.0	5.0	0	
Lakeview/Ashton Mini Park	0.5	0.5	0.1	0.2	0.2	0.5	0	0	0	651	0	0	651				
McLaren Park****	306.3 312.6	159.0 165.3	31.7 34.9	66.0 68.3	60.6 61.4	158.3 164.6	19,500	809	18,691	59,185	15,681	0	43,504	61.7	8.3	53.4	Yes
Mount Davidson	40.2	40.2	8.8	11.0	20.1	39.9	11,000	1,600	9,400	15,456	2,867	0	12,589				
Palou-Phelps	2.5	2.1	0.8	0.4	0.8	2.0	40	2	38	1,049	527	496	1,018				
Pine Lake	30.3	8.4	1.0	3.8	3.6	8.4	1,000	0	1,000	3,157	608	13	2,562	3.3	0	3.3	No
Rock Outcrop	1.6	1.6	0.8	0.7	0	1.5	0	0	0	0	0	0	0				
Tank Hill	2.9	2.9	1.5	0.6	0.7	2.8	50	0	50	2,672	1,411	0	1,261				
Twin Peaks	34.1	31.1	12.6	14.3	3.8	30.7	88	3	85	8,741	2,303	501	6,939				
15th Avenue Steps	0.3	0.3	0	0.2	0	0.2	0	0	0	0	0	0	0				
San Francisco Subtotal	2,312.9	869.5	159.0	305.1	401.5	865.6	63,433	3,448	59,985	196,562	53,758	4,105	146,909	95.2	19.3	75.9	
Sharp Park (Pacifica)	411.0	237.2	35.0	125.1	76.5	236.6	54,000	15,000	39,000	14,741	653	1,792	15,880				
Total	2,723.9	1,106.7	194.0	430.2	478.0	1,102.2	117,433	18,448	98,985	211,303	54,411	5,897	162,789	95.2	19.3	75.9	

*The total acreages for the management areas do not exactly match the Natural Areas acreages. The Natural Areas acreages are based on vegetation series within each Natural Area where the geographic information system data was precisely clipped to the Natural Area boundary.

Management areas were created by mapping their boundaries in the field with a GPS unit. This data was then edited by Natural Areas Program staff to match Natural Areas boundaries. This process created minor errors when the management area appeared to line up with the Natural Area boundary but in fact was off by a small amount. The average error is about 0.1 acre and never more than 0.8 acre. As would be expected, the error is largest in the larger Natural Areas because they have relatively longer boundaries.

**The SFRPD would monitor dog use and impacts on oak woodlands at Buena Vista and Golden Gate Park Oak Woodlands and impacts on small wildflower meadows in McLaren Park.

***Glen Canyon Park and O'Shaughnessy Hollow are two different Natural Areas; they are grouped together in this table, as they are in the SNRAMP.

****The acreage of the management areas within McLaren Park have been revised to reflect the exclusion of a portion of the Amazon Reservoir Tract that is under the jurisdiction of the SFPUC. Information regarding the number of trees, trails, or DPAs within the SFPUC Amazon Reservoir Tract and SFRPD McLaren Park is not available.

Note: All trees removed would be replaced, although not necessarily with the same species or within the same Natural Area.

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The text provided in the ninth bullet on Draft EIR p. 136 has been changed as follows:

LM-7a—Relocate the DPA to a different area to avoid disturbing breeding birds in the current location; (Note: The SFRPD determined following completion of the final draft SNRAMP that, due to ongoing disturbance of breeding birds, this DPA should be closed, rather than monitored. This DPA would be closed in accordance with the SFRPD Final Dog Policy (SFRPD 2002) and SFPUC's Lake Merced Watershed Report (SFPUC 2011). ~~Due to the San Francisco moratorium on new DPAs, the Lake Merced DPA couldn't be relocated to a new location, so it would only be removed.~~ Restoration of the site would continue, following removal of the DPA.)

A second full paragraph has been added to Draft EIR p. 137 in Section III.I.19:

McLaren Park covers 312.6 acres near the southeast corner of San Francisco and is bisected by Mansell Street. Sunnydale and Visitacion Avenues cross the southern half of the park, while John F. Shelley Drive crosses the northern half. Recreational facilities within the park include over 11 miles of trails, tennis courts, ball fields, a golf course, picnic areas, and an amphitheater. Three designated DPAs are within the park, two within and one next to the Natural Area. The Natural Area covers 165.3 acres and is made up of grassland, scrub, and tree-dominated vegetation series.

Since publication of the SNRAMP, the SFRPD noted that the SNRAMP identified the McLaren Park Natural Area as entirely within SFRPD jurisdiction; however, a 12-acre portion of McLaren Park known as the Amazon Reservoir Tract is under the jurisdiction of the SFPUC. The SFPUC has recently indicated their desire to regain management of 6.32 acres of the Amazon Reservoir Tract and have requested that it is removed from the SNRAMP and SNRAMP Draft EIR. Consequently, as the SNRAMP would no longer apply to a portion of the Amazon Reservoir Tract, the Draft EIR has been revised to reflect removal of this area from the SNRAMP. Table 5 of this EIR reflects this change, further describing which management areas would be reduced in size.

A graphical representation of the 6.32-acre portion of the Amazon Reservoir Tract relative to the rest of McLaren Park is provided as Figure RTC-1, p. 2-11.

5.B.3 Section V.A: Introduction

The text on Draft EIR p. 167, last paragraph, has been changed as follows:

For the purposes of this EIR, the analysis of the potential for the project's incremental effects to be cumulatively considerable is based on a list of related projects identified by San Francisco and neighboring jurisdictions, as provided in Appendix G of this EIR. This list includes those San Francisco Planning Department projects within a quarter mile of a Natural Area that are active or that were closed on or after January 1, 2009. The list also includes General Plan area plans within a quarter mile of each Natural Area. The analysis is also based on reasonably anticipated buildout of the San Francisco General Plan or other planning documents, depending on the specific impact being analyzed. The list of cumulative projects provided in Appendix G was updated in the summer of 2016 to include those past, present, or reasonably foreseeable projects identified since 2009. The updated list is provided in Section 0, RTC p. 61, which will augment Appendix G of the Draft EIR. None of the projects identified since 2009 result in a change in the analysis or conclusions of the cumulative impact analysis provided in the Draft EIR.

5.B.4 Section V.D: Cultural and Paleontological Resources

The text on Draft EIR pp. 221–222, last paragraph, has been changed as follows:

Impact CP-6. Implementation of the Sharp Park restoration activities that include raising holes 10, 14, 15, and 18 would not result in a substantial adverse change in the significance of the Sharp Park Golf Course, a historic resource under CEQA. (Less than Significant)

As discussed in Section V.D.2, Sharp Park Golf Course meets the criteria for listing on the NRHP and CRHR for its significance under Criteria A and C and for listing on the CRHR under Criteria 1 and 3. At Sharp Park, excavated dredged spoils appropriate for use as golf course substrate materials ~~would~~ may be used on-site to raise Holes 10, 14, 15, and 18 and to create the upland habitat on the east edge of Laguna Salada. ...

The text on Draft EIR p. 237, last paragraph (under Impact CP-21), which addresses cumulative cultural resources impacts, has been changed as follows:

Impact CP-21: The proposed project, in combination with other planned and foreseeable future projects, would have a cumulatively considerable significant impact related to cultural and paleontological resources. (Significant and Unavoidable)

Cumulative projects, such as the Sharp Park Recycled Water project, the San Andreas Pipeline Number 3 project, the Water System Improvement Program and its associated facility improvement projects (e.g., Groundwater Project B and the San Francisco Groundwater Project), the SFPUC Sunset Supply Pipeline Vegetation project, the Pacific Rod and Gun Club Upland Soil Remedial Action Project, and the ground disturbing projects at McLaren Park, involve construction and development at Sharp Park, McLaren Park, and Lake Merced. All three Natural Areas were determined to have high archaeological sensitivity (King 2010), and Sharp Park also includes historic architectural and potential historic landscape resources, including the Sharp Park Golf Course (a historic resource) and urban forests. The cumulative projects also involve construction and development in the vicinity of Natural Areas, such as the 15th Avenue Steps ...

Section IV.D, Cultural and Paleontological Resources, contained an incorrect reference to Mitigation Measure M-RE-6, Restoration of the Sharp Park Golf Course to 18 Playable Holes, p. 264, as M-RE-1, which doesn't exist in the Draft EIR. Accordingly, the text on Draft EIR p. 238 and 239 has been changed as follows:

Mitigation Measure M-RE-~~6~~ would require SFRPD to coordinate with a golf course consultant with expertise in historic golf course renovation and with specific expertise, if possible, in golf courses designed by Alistair MacKenzie, to restore the playability of the Sharp Park Golf course while documenting and preserving the historic character-defining features of the course and avoiding impacts to sensitive biological resources. However, if any reconfiguration of the course resulted in additional holes east of Highway 1, this would result in a significant impact on the historical significance of Sharp Park Golf Course, further contributing to significant cumulative impacts. Reconfiguration of the golf course holes to resemble its original layout (replacement holes west of Highway 1) would reduce cumulative impacts on the golf course. This reconfiguration would result in a total of 15 holes on the west side of Highway 1 and three holes on the east side. Mitigation Measure M-RE-~~6~~ would be beneficial to the Sharp Park Golf Course because it would restore some of the elements in the original design of this course, such as coast side holes. This mitigation measure would change the layout of the holes, but the new holes would be in areas of the course where holes were situated in the original design, and would be in keeping with the

historic boundaries of the golf course. While impacts to cultural resources were determined to be significant and unavoidable in terms of modifying Holes 10 and 13 and closing or replacing Hole 12, recreation impacts would be reduced to a less-than-significant level by retaining the golf course as an 18-hole course, as required by Draft EIR Mitigation Measure M-RE-6, Restoration of the Sharp Park Golf Course to 18 Playable Holes, Draft EIR p. 264.

5.B.5 Section V.G: Biological Resources

The text of Draft EIR p. 289 (fourth paragraph) has been changed as follows:

Among the Natural Areas, India Basin is the only one that borders San Francisco Bay and provides the only habitat for migratory shorebirds. There are ten species of birds that are considered locally sensitive that have been observed at India Basin, and several of these are not found at other Natural Areas: black oystercatcher (*Haematopus bachmani*), pelagic cormorant (*Phalacrocorax pelagicus*), Brandt's cormorant (*P. penicillatus*), and pigeon guillemot (*Cepphus columba*). None of the locally significant species that have been observed are known to breed at India Basin. The restored wetlands and mudflats support nesting American avocet (*Recurvirostra americana*) and killdeer (*Charadrius vociferus*). According to the Golden Gate Audubon Society (as reflected in their comment later dated October 31, 2011), during the bird breeding season of 2011, California clapper rail young were observed on multiple occasions at Heron's Head Park (north of the wetlands at India Basin Park). The Golden Gate Audubon Society further stated that this was the first detection of (likely) breeding California clapper rail in a considerable period, and it is believed that the nesting pair derived from rail populations further south in the Bay. If restored, the more extensive saltgrass/pickleweed area could provide habitat for California black rail (*Laterallus jamaicensis coturniculus*) and California clapper rail (*Rallus longirostris obsoletus*), both protected under the state and federal Endangered Species Acts.

The text on Draft EIR pp. 345 and 346 (Impact BI-19), which addresses cumulative biological resource impacts, has been changed as follows:

Impact BI-19: The proposed project, in combination with other planned and foreseeable future projects, would result in a cumulatively considerable significant impact related to biological resources. (Significant and Unavoidable)

Projects that temporarily disturb or permanently remove open space and wildlife habitat include the Candlestick Point-Hunters Point Shipyard Phase II Development and 150 acres of proposed residential development and 85,000 square feet of proposed commercial development in Pacifica. These projects may remove and fragment habitat, possibly resulting in increased use of the Natural Areas by common and special status wildlife, making those areas more critical for biological conservation efforts. Additional recreation facilities also are proposed at McLaren Park and Oak Woodlands in Golden Gate Park. The cumulative projects also include construction and development in the vicinity of such Natural Areas as the 15th Avenue Steps, Corona Heights, and the San Francisco Botanical Garden (Lily Pond and Buena Vista Park). As with all projects that include ground disturbance, development, or vegetation removal, there is potential to adversely impact biological resources. An increase in pedestrian traffic in the Natural Areas over time may result in impacts to special status plant species and sensitive natural communities due to trampling; however, improved trail systems, fencing, and signs would reduce any such impacts. In combination with the SNRAMP, the cumulative regional projects proposed to occur within the vicinity of several Natural Areas would have potentially significant adverse impacts on biological resources over both the short-term and the long-term. The goal of the SNRAMP is to preserve and maintain open space in the region and the mitigation measures identified previously in this section

would be implemented to protect biological resources; as a result, the SNRAMP would not result in a cumulatively considerable adverse impact on biological resources.

Implementation of the proposed GGNRA Dog Management Plan may further restrict dog access and off-leash areas within GGNRA land holdings. In addition, the SNRAMP proposes to close the Lake Merced DPA and reduce the size of the DPAs at Bernal Hill and McLaren Park; however, on-leash dog use would still be allowed at these and all other Natural Areas.

The reductions in off-leash areas proposed by the GGNRA could result in an increase in both on-leash and off-leash dog use at the Natural Areas. The actions proposed by the GGNRA and the SNRAMP could result in concentrated dog use within the remaining off-leash areas, as further described in Impact RE-7. Increased use may result in impacts to biological resources within the Natural Areas DPAs, including disturbance of breeding birds and damage to special status plants. The cumulative combination of proposed dog management for the Natural Areas and the GGNRA project could result in indirect significant impacts on biological resources in the Natural Areas. The comparative contributions of ~~the~~ each project to this potentially significant cumulative impact cannot be determined based on the speculative nature of the behavioral and physical factors contributing to that determination, such as where an individual chooses to travel on a particular day, the level of future restrictions within and outside of the Natural Areas and GGNRA lands, and physical factors, such as driving distances. The potentially significant impact to biological resources as a result of increased use resulting from cumulative actions could be mitigated by adding a new DPA at a nearby Natural Area or other nearby property. However, ~~there is a current moratorium²¹⁷ on new DPAs~~ this EIR assumed that no new nearby DPAs are under construction, and adding a new DPA may not mitigate impacts from reducing or closing DPAs because it is speculative to predict precisely the magnitude or location of redistribution of dog walkers related to the implementation of the SNRAMP in combination with the GGNRA Dog Management Plan. Numerous factors are difficult to predict, including human behavior, level of future restrictions within and outside of the Natural Areas and GGNRA lands, and physical factors, such as driving distances. Therefore, no feasible mitigation exists that would reduce this impact—the mitigation, therefore would not be feasible. As a result, it is conservatively concluded that the proposed project's contribution would be potentially *significant and unavoidable*.

Overall, potential net cumulative long-term impacts on biological resources associated with the SNRAMP are expected to be beneficial. Implementing the plan's measures would increase the amount of wildlife habitat, would preserve and augment special status species and sensitive habitats, would improve habitat connectivity and biodiversity, would reduce nonnative and invasive vegetation, and would increase native vegetative cover. Other existing and future foreseeable cumulative projects in the area that would add to these beneficial effects include the SFRPD trails program, which would improve trails to protect natural resources and sensitive habitats, ~~and~~ the SFRPD forestry program, which would focus on native tree planting and restoration; the Sharp Park Safety, Infrastructure Improvement, and Habitat Enhancement Project, which would include construction of a 1,600-square-foot perennial pond and removal of sediment and emergent vegetation from Horse Stable Pond; and the USF Mount Sutro Management Project, which would include activities to reduce the risk of wildfires, improve forest health, and promote native plant restoration and enhancement.

²¹⁷—~~There is direction from the Recreation and Park Commission not to establish new DPAs until systemwide DPA planning is completed. For the purposes of this EIR, this is considered a moratorium in that no new DPAs are reasonably foreseeable. This direction was announced at the October 10, 2006, meeting of the San Francisco Dog Advisory Committee.~~

5.B.6 Section V.H: Hydrology and Water Quality

The text on Draft EIR p. 380, third full paragraph (under Impact HY-16), which addresses cumulative hydrology and water quality impacts, has been changed as follows:

A number of projects have been implemented, are planned, or are being conducted on a pilot scale that could impact groundwater elevations and quality in the North Westside Basin in San Francisco, such as the San Francisco Groundwater Supply Project and the proposed Vista Grande Drainage Basin Improvement Project.²¹⁸ These projects also could affect water elevations and water quality in Pine Lake and Lake Merced. Conjunctive use of groundwater in the North Westside Basin could alter water levels in the lakes, likely making lake levels more stable, which is consistent with the goals of the project. Continued or expanded use of stormwater to recharge Lake Merced may also help to stabilize the lake level. Recycled treated wastewater recharging the North Westside Basin aquifer could also help to maintain and stabilize lake levels, reducing reliance on natural recharge to replenish the aquifer. Lake elevations might be maintained at ~~higher~~ different elevations than in previous years, resulting in the need to alter or adapt operation and maintenance of the lakes and shorelines to future conditions that differ from current conditions. Further, with respect to Lake Merced, the San Francisco Groundwater Supply Project includes a mitigation measure (Mitigation Measure M-HY-9) that requires corrective action if project-related lake levels decline below trigger levels identified in the mitigation measure. These corrective actions include adding supplemental water and/or altering or redistributing pumping patterns. Implementation of this mitigation measure would ensure that any lake-level decline resulting from the project would be temporary, and the project would not result in long-term changes in water quality that would affect the potential beneficial uses of Lake Merced. The Vista Grande Drainage Improvement Project²¹⁹ also has implications for Impound Lake and the water levels around Lake Merced, which will be evaluated in the EIR from the perspective of project-related and cumulative impacts. The proposed project would not contribute to any groundwater effects associated with these projects.

5.B.7 Section V.I: Hazards and Hazardous Materials

The text on Draft EIR p. 398 has been changed as follows:

Impact HZ-19: The proposed project, in combination with other planned and foreseeable future projects, would not result in a cumulatively considerable significant impact related to hazards and hazardous materials. (Less than Significant)

Risks from hazardous materials impacts, including the use of pesticides, are generally localized and site specific, with the exception of those resulting from the transportation of hazardous materials. These risks are generally site specific, so the geographic context for the analysis of the use of hazardous materials and fire hazards is limited to the area surrounding the project site, while cumulative impacts from transporting hazardous materials are analyzed for projects along the transportation routes. As a result, relevant cumulative projects typically involve demolition and construction activities, such as the Hunters Point Shipyard/Candlestick Point Redevelopment project. In the case of the Rod and Gun Club Upland Soil Remedial Action Project, the project itself was specifically intended to clean up existing soil contamination, thereby creating a beneficial

²¹⁸ As of June 2016, the Draft EIR for the Vista Grande Drainage Basin Improvement Project was in public review.

²¹⁹ As of June 2016, the Draft EIR for the Vista Grande Drainage Basin Improvement Project was in public review.

effect with respect to the presence of hazardous materials in the vicinity of the Lake Merced Natural Area.

5.B.8 Chapter VI: Other CEQA Issues

The text on Draft EIR p. 453, in Table 19, has been changed as follows:

**Table 19
Regulations Applicable to the Proposed Project**

<i>Regulation</i>	<i>Project Requirement</i>
Mandatory Recycling and Composting Ordinance (Environment Code, Chapter 19)	Minor quantities of solid waste and recyclable material would be generated during the management of the Natural Areas. Unless it can be used to create wildlife habitat, all large woody debris generated by the Natural Areas Program would be composted in Golden Gate Park; vegetation debris from Sharp Park would be disposed of at the Sharp Park organic dump <u>green waste facility</u> . The wood chips may be used to suppress understory invasive vegetation or could be used as beneficial mulch on other revegetation projects in the Natural Areas. Also, large tree trunks may be left on site if they provide habitat value, or they may be used for recreational or maintenance purposes within the Natural Area.
San Francisco Green Building Requirements for construction and demolition debris recycling (SF Building Code, Chapter 13C)	Minor quantities of solid waste and recyclable material would be generated during the management of the Natural Areas.
San Francisco Clean Construction Ordinance (Ordinance 70-07)	Contractors on public works construction projects that take 20 days or more to complete must reduce vehicle emissions that contribute to GHG accumulation by (1) using a blend of at least 20 percent biodiesel in off-road vehicles and construction equipment and (2) using construction equipment with engines that meet Tier 2 standards or use best available control technology.

5.B.9 Chapter VII: Alternatives

The text provided in the last paragraph on Draft EIR p. 461 has been changed as follows:

Table 20 provides a general description of the project alternatives compared to the proposed SNRAMP. They are alternatives to the proposed project’s programmatic actions, as well as alternatives to the Sharp Park project, covered at the project-level in this EIR. These differences would be articulated in modifications to the SNRAMP if an alternative was selected. Routine maintenance was found to result in less than significant impacts, or less than significant with mitigation, so the alternatives do not include different maintenance level activities. Additionally, dead, diseased, and hazardous trees removed under all alternatives would be consistent with tree maintenance health and safety goals of the Natural Areas Program. No new DPAs would be created under any of the project alternatives, ~~consistent with the SFRPD’s current moratorium on new DPAs.~~

The text provided in the second row of Table 20 on Draft EIR p. 463 has been changed as follows:

DPA reductions	The proposed project includes a 20 percent reduction in DPA acreage.	The No Project Alternative would not close or reduce the acreage of existing DPAs.	The Maximum Restoration Alternative includes moderately greater reduction in DPA acreage, focusing on reducing DPA acreage in MA-1 and MA-2 areas.	The Maximum Recreation Alternative would not close or reduce the acreage of existing DPAs. There would be no new DPAs, in accordance with the City’s moratorium on new DPAs.	The Maintenance Alternative would not close or reduce the acreage of existing DPAs.
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The text on Draft EIR p. 467, first full paragraph, has been changed as follows:

Compared to the proposed project, the No Project Alternative would involve moderately less invasive tree and vegetation removal and closure of fewer trails. The No Project Alternative would not result in new trails because routine maintenance would be limited to that described in Section III.F.2. ~~Consistent with the SFRPD moratorium,²²⁰~~ The No Project Alternative would not create any new DPAs.

The text on Draft EIR pp. 480 (last paragraph) and 481 (first paragraph) has been changed as follows:

The Maximum Restoration Alternative would further reduce the amount of DPA acreage, as compared to the proposed project, focusing on closing or reducing the DPA acreage in MA-1 and MA-2 areas. ~~Consistent with the SFRPD moratorium²²¹ on new DPAs,~~ This alternative would not add any new DPAs to the Natural Areas.

The text on Draft EIR p. 482, second paragraph, has been changed as follows:

The Maximum Restoration Alternative would have aesthetic impacts similar to those under the proposed project but with moderately more invasive vegetation and tree removal projects. Therefore, although the types of aesthetic impacts are similar to those of the proposed project, the magnitude of those impacts on scenic resources in the Natural Areas and on the visual character or quality of the Natural Areas would be greater than under the proposed project because the Maximum ~~Recreation~~Restoration Alternative would result in more changes to vegetation. However, invasive tree and vegetation removal would be followed by revegetation with native plants, so, overall, the Natural Areas would continue to be characterized as relatively undeveloped landscapes that allow for recreation. As evidenced in the visual simulations under the proposed project at Sharp Park and Mount Davidson, tree removal would not result in noticeable changes to the visual character or quality of the Natural Areas and would not have a substantial adverse effect on a scenic vista. Even with a moderately greater number of trees removed, as proposed under the Maximum Restoration Alternative, tree removal, which would be followed by revegetation with native trees and other native plants, would not significantly affect scenic views or vistas and would not result in a substantial demonstrable impact on the visual character or quality of the Natural Areas. Similar to the proposed project, under the Maximum Restoration Alternative, new trees would be placed in the Natural Areas to preserve important viewsheds and vistas. As such, the Maximum Restoration Alternative would have less than significant aesthetics impacts.”

The text on Draft EIR p. 487, last paragraph, has been changed as follows:

Sensitive Natural Communities and Wetlands. The greater amount of programmatic vegetation removal and replacement under this alternative would increase short-term disturbance of sensitive

²²⁰—~~There is direction from the Recreation and Park Commission not to establish new DPAs until systemwide DPA planning is completed. For the purposes of this EIR, this is considered a moratorium in that no new DPAs are reasonably foreseeable. This direction was announced at the October 10, 2006, meeting of the San Francisco Dog Advisory Committee.~~

²²¹—~~There is direction from the Recreation and Park Commission not to establish new DPAs until systemwide DPA planning is completed. For the purposes of this EIR, this is considered a moratorium in that no new DPAs are reasonably foreseeable. This direction was announced at the October 10, 2006, meeting of the San Francisco Dog Advisory Committee.~~

natural communities and wetlands, compared to the proposed project. While these impacts would be temporary, implementing Mitigation Measure M-BI-1 would reduce temporary impacts on riparian and wetlands by requiring ~~avoidance~~ avoidance and minimization measures.

The text on Draft EIR pp. 493 (last paragraph) and 494 (first paragraph) has been changed as follows:

The Maximum Recreation Alternative would close informal and social trails in MA-1 areas but not all informal and social trails in MA-2 and MA-3 areas. This alternative includes moderately more trail creation in MA-2 and MA-3 areas than the proposed project and would also allow mountain biking and horseback riding where those uses would not conflict with special status species and their habitats (both protected species and locally significant species). Over time, the Maximum Recreation Alternative would result in Natural Areas with a greater amount of trail coverage, less native plant and animal habitat, and a greater amount of nonnative urban forest coverage. The Maximum Recreation Alternative would not close or reduce DPAs, but no new DPAs would be created in the Natural Areas, ~~consistent with the SFRPD moratorium²²² on new DPAs~~. Large-scale programmatic projects would occur under this alternative, but most of those projects would be to provide new trails or other recreation facilities in the Natural Areas.

The text on Draft EIR p. 512 (first full paragraph) has been changed as follows:

As the Maintenance Alternative would preserve the current trail system, it would not close trails or create new trails. The Maintenance Alternative would not close or reduce DPAs; however, no new DPAs would be created in the Natural Areas, ~~consistent with the SFRPD moratorium²²³ on new DPAs~~. Large-scale programmatic projects would occur under this alternative, but most of those projects would be directed at erosion control, with some invasive vegetation removal and no trail modifications.

5.B.10 Figure Changes

Figure 3, Laguna Salada Restoration Features, on Draft EIR p. 101 has been modified to emphasize that on-site sediment from Laguna Salada will be used to create upland habitat proposed by the project, to remove reference to raising certain golf course fairways, and to include the location of the Green Waste Facility and Rifle Range (both proposed locations for sediment re-use) within the extent of the figure. These modifications are shown in hatched yellow and yellow call-outs on the attached revised Figure 3.

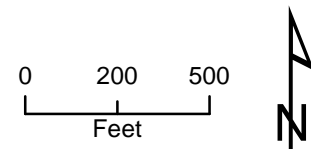
²²² ~~There is direction from the Recreation and Park Commission not to establish new DPAs until systemwide DPA planning is completed. For the purposes of this EIR, this is considered a moratorium in that no new DPAs are reasonably foreseeable. This direction was announced at the October 10, 2006, meeting of the San Francisco Dog Advisory Committee.~~

²²³ ~~There is direction from the Recreation & Park Commission not to establish new DPAs until systemwide DPA planning is completed. For the purposes of this EIR, this is considered a moratorium in that no new DPAs are reasonably foreseeable. This direction was announced at the October 10, 2006, meeting of the San Francisco Dog Advisory Committee.~~



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Laguna Salada Restoration Features



Pacifica, California

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5.B.11 Draft EIR Appendix G

The following list of additional cumulative projects is added to the EIR to include those past, present, or reasonably foreseeable projects identified since 2009.

San Francisco Related Cumulative Projects List (Since 2009)			
<u>Natural Area</u>	<u>Case No.</u>	<u>Project Name</u>	<u>Description</u>
Planning Cases			
<u>BALBOA NATURAL AREAS</u>	<u>2011.1075E</u>	<u>RPD-Sutro Dunes @ Great Highway/Balboa Ave</u>	<u>RPD-Sutro Dunes @ Great Highway/Balboa Ave installation at 4 new benches along existing pathway.</u>
<u>BAY VIEW PARK</u>	<u>2014-000835ENV</u>	<u>RPD Ralph D. House Park Improvements (845 Meade Ave)</u>	<u>Add pathway improvements, irrigation, and site furnishings to existing park.</u>
<u>BAY VIEW PARK</u>	<u>2010.1124E</u>	<u>RPD-Bay View Park</u>	<u>RPD-Bay View Park trail restoration.</u>
<u>BAY VIEW PARK</u>	<u>2009.0311E_3</u>	<u>SUNNYDALE SEWER IMPROVEMENT</u>	<u>SFPUC auxiliary sewer project to alleviate flooding in the Visitation Valley/Sunnydale neighborhood, with new main alignment N along county line to SF Bay; previous main tunnel alignment (1998.123E) Negative Declaration.</u>
<u>BAY VIEW PARK</u>	<u>2009.0311E</u>	<u>SUNNYDALE SEWER IMPROVEMENT</u>	<u>SFPUC auxiliary sewer project to alleviate flooding in the Visitation Valley/Sunnydale neighborhood, with new main alignment N along county line to SF Bay; previous main tunnel alignment (1998.123E) Negative Declaration.</u>
<u>BERNAL HEIGHTS PARK</u>	<u>2011.1042E</u>	<u>RPD-Precita Park Improvements (296 PRECITA AV)</u>	<u>Improvements to Precita's park playground including a kiosk installation.</u>
<u>BERNAL HEIGHTS PARK</u>	<u>2010.1126E</u>	<u>RPD-Bernal Heights Park</u>	<u>RPD-Bernal Heights Park trail restoration.</u>
<u>BERNAL HEIGHTS PARK</u>	<u>2012.1340E</u>	<u>RPD-Brewster Community Garden</u>	<u>RPD-Brewster Community Garden</u>
<u>BERNAL HEIGHTS PARK</u>	<u>2013.0678E</u>	<u>RPD-BERNAL HEIGHTS PARK LIGHT POLL INSTALLATION</u>	<u>RPD-BERNAL HEIGHTS PARK LIGHT POLL INSTALLATION</u>
<u>BERNAL HEIGHTS PARK</u>	<u>2009.0276E</u>	<u>CESAR CHAVEZ AUXILIARY SEWER</u>	<u>New 1.2mi auxiliary sewer to address localized flooding, Cesar Chavez Street Area. Alignment from east: off Napoleon, Jerrold, Precita, Cesar Chavez west to Valencia, Duncan, Guerrero, Fair, Coleridge, Coso. Replaces existing brick sewer in Cesar Chavez</u>

San Francisco Related Cumulative Projects List (Since 2009)

<u>Natural Area</u>	<u>Case No.</u>	<u>Project Name</u>	<u>Description</u>
<u>BILLY GOAT HILL</u>	<u>2010.0446E</u>	<u>RPD-Billy Goat Hill</u>	<u>Repair and replace landscaping at park.</u>
<u>BILLY GOAT HILL</u>	<u>2015-003999ENV</u>	<u>RPD Walter Haas Connector Trail</u>	<u>Construct 580' long, 3-4' wide connector trail with box steps between Walter Haas Playground Park and Beacon Street/Billy Goat Hill Park. Enact erosion control measures and install protective fencing. Remove hazardous trees and restore native plants in t</u>
<u>BUENA VISTA PARK</u>	<u>2012.0198E</u>	<u>RPD-Buena Vista Park Rehab Project</u>	<u>Rehab and replace deteriorating wooden structures and prevent erosion. Replace wooden retaining wall and steps. Soil installation for stabilization. Erosion control measures.</u>
<u>BUENA VISTA PARK</u>	<u>2013.0006E</u>	<u>RPD-Buena Vista Park Erosion Control Project</u>	<u>Rehab and replace deteriorating wooden structures and prevent erosion. Replace wooden retaining wall and steps. Soil installation for stabilization.</u>
<u>BUENA VISTA PARK</u>	<u>2009.0269E</u>	<u>RPD-Buena Vista Park Improvement</u>	<u>Trail extension, clearing and grubbing, erosion control measures, small retaining walls, and native plantings.</u>
<u>CORONA HEIGHTS</u>	<u>2010.0445E</u>	<u>RPD-Corona Heights (199 Museum Way)</u>	<u>Repair and replace existing landscaping.</u>
<u>DUNCAN/CASTRO OPEN SPACE</u>	<u>2012.0994E</u>	<u>SFPUC-Arastradero Rd Encroachment Permit</u>	<u>SFPUC-Arastradero Rd Encroachment Permit</u>
<u>GLEN CANYON PARK</u>	<u>2011.1141E</u>	<u>RPD-Glen Canyon Park Improvements</u>	<u>RPD-Glen Canyon Park Improvements</u>
<u>GLEN CANYON PARK</u>	<u>2012.0483E</u>	<u>RPD-Douglass Park Dog Park</u>	<u>RPD-Douglass Park Dog Park</u>
<u>GOLDEN GATE HEIGHTS PARK</u>	<u>2013.0026E</u>	<u>430 SAN MARCOS AV-Hawk Hill Park</u>	<u>Hawk Hill Park upgrades</u>
<u>GOLDEN GATE HEIGHTS PARK</u>	<u>2010.0930E</u>	<u>PUC-Forest Hill Pump Station Upgrades Project</u>	<u>Demolition of the existing pump station and replacement with a new potable water pump station to meet current Building Code standards as an essential utility facility.</u>
<u>GOLDEN GATE PARK</u>	<u>2010.1068E</u>	<u>RPD-Haight Ashbury-HANC Recycling Center</u>	<u>Remove recycling center and replace with community garden.</u>
<u>GOLDEN GATE PARK</u>	<u>2012.1380E</u>	<u>RPD-GGP Community Garden</u>	<u>Improve paved portion of parkland into a community garden.</u>
<u>GOLDEN GATE PARK</u>	<u>2012.0996E</u>	<u>RPD-Lily Pond Frog Removal</u>	<u>RPD-Lily Pond Frog Removal</u>
<u>GOLDEN GATE PARK</u>	<u>2011.1343E</u>	<u>RPD-GGP Forestry Program Tree Abatement & Pruning</u>	<u>RPD-GGP Forestry Program Tree Abatement & Pruning</u>
<u>GOLDEN GATE PARK</u>	<u>2010.0016E</u>	<u>RPD-Golden Gate Park Beach Chalet Soccer Fields</u>	<u>Replace four existing turf fields with new artificial turf and add new park amenities such as benches, bleachers, picnic tables, bbq pits, new maintenance shed, new pedestrian pathways, etc.</u>
<u>GOLDEN GATE PARK</u>	<u>2009.0419E</u>	<u>Japanese Tea Garden</u>	<u>Alterations to the Tea House and Gift Shop repair and rehabilitation of exterior finishes of tea house and gift shop, kitchen remodel, lighting modifications tea sipping and preparation, retail concession</u>

San Francisco Related Cumulative Projects List (Since 2009)

<u>Natural Area</u>	<u>Case No.</u>	<u>Project Name</u>	<u>Description</u>
<u>GOLDEN GATE PARK</u>	<u>2014.0811E</u>	<u>RPD KEZAR TRACK REPLACEMENT & IMPROVEMENTS</u>	<u>Replace track in kind; install new furnishings (e.g., slot drain, fountains, goal posts, sand catchers, take off boards, shot put sand fines).</u>
<u>GOLDEN GATE PARK</u>	<u>2013.0983E</u>	<u>RPD-KEZAR TRIANGLE</u>	<u>Landscaping improvements, including new plantings, pedestrian pathways, irrigation, seating, a kiosk, signage, and temporary art displays.</u>
<u>GOLDEN GATE PARK</u>	<u>2014.1427E</u>	<u>RDP STERN GROVE (TROCADERO) CLUBHOUSE IMPROVEMENTS</u>	<u>Replace deck, ramp, and guardrails for ADA compliance</u>
<u>GOLDEN GATE PARK</u>	<u>2012.0149E</u>	<u>RPD-Bowling Green GGP</u>	<u>RPD-Bowling Green GGP</u>
<u>GOLDEN GATE PARK</u>	<u>2012.0634E</u>	<u>RPD-Rossi Playground annex Restroom replacement</u>	<u>Rossi PG/Edward Street Restroom-The replacement of a free-standing, public restroom structure at Rossi Playground Annex</u>
<u>JOHN MCLAREN PARK</u>	<u>2014.1488E</u>	<u>RPD MCLAREN PARK BASKETBALL COURT IMPROVEMENTS</u>	<u>Resurface existing half-size basketball court.</u>
<u>JOHN MCLAREN PARK</u>	<u>2011.1092E</u>	<u>RPD-John McLaren Park New Signage/Message Boards</u>	<u>RPD-John McLaren Park New Signage/Message Boards</u>
<u>JOHN MCLAREN PARK</u>	<u>2011.1247E</u>	<u>RPD-McLaren Park Playground Improvements</u>	<u>RPD-McLaren Park Playground Improvements</u>
<u>JOHN MCLAREN PARK</u>	<u>2011.0281E</u>	<u>RPD-Crocker Amazon Bocce Ball Courts</u>	<u>RPD-Crocker Amazon Bocce Ball Courts</u>
<u>JOHN MCLAREN PARK</u>	<u>2015-004546ENV</u>	<u>SFPUC-Upper Yosemite Creek Daylighting Project</u>	<u>Construct an open channel and associated improvements along the streetscape right-of-way in the northeast corner of McLaren Park and along the edge of the University Mound Reservoir parcel. Construct subsurface detention/retention tanks under Louis Sutte</u>
<u>JOHN MCLAREN PARK</u>	<u>2013.0354E</u>	<u>RPD-McLaren Park</u>	<u>RPD-Persia Ave McLaren Park-Bike Park</u>
<u>JOHN MCLAREN PARK</u>	<u>2013.1888E</u>	<u>RPD-Crocker Amazon Park Upgrades</u>	<u>Trail improvements and stairway and bench replacement for ADA compliance</u>
<u>JOHN MCLAREN PARK</u>	<u>2012.0519E</u>	<u>RPD-Crocker Amazon Park Light Replacement</u>	<u>RPD-Crocker Amazon Park Light Replacement</u>
<u>JOHN MCLAREN PARK</u>	<u>2010.1129E</u>	<u>RPD-John McLaren Park Trail Restoration</u>	<u>RPD-John McLaren Park Trail Restoration</u>
<u>LAKE MERCED</u>	<u>2010.0099E</u>	<u>PUC-Sunset Supply Pipeline Vegetation Clearing</u>	<u>Remove trees and vegetation around the Sunset Supply Pipeline.</u>

San Francisco Related Cumulative Projects List (Since 2009)

<u>Natural Area</u>	<u>Case No.</u>	<u>Project Name</u>	<u>Description</u>
<u>LAKE MERCED</u>	<u>2012.1100E</u>	<u>1 ZOO RD</u>	<u>Replace existing playground equipment and surfacing within the current Elinor Friend Playground</u>
<u>LAKE MERCED</u>	<u>2012.0232E</u>	<u>RPD/PUC-Park Merced Boat House</u>	<u>Park Merced Boat House restaurant remodel</u>
<u>LAKE MERCED</u>	<u>2012.0232E_3</u>	<u>RPD/PUC-Park Merced Boat House</u>	<u>Park Merced Boat House restaurant remodel</u>
<u>LAKE MERCED</u>	<u>2013.1220E</u>	<u>SFPUC-Pacific Rod & Gun Club Site Remediation</u>	<u>Remedial excavation of contaminated soils from 0.5 to 4 feet below ground surface. Preliminary estimated total volume of soil to be excavated at the site is 30,600 cubic yards.</u>
<u>LAKE MERCED</u>	<u>2013.1335E</u>	<u>RPD-Harding Park Golf Course Maintenance</u>	<u>Harding Park Golf Course Maintenance</u>
<u>LAKE MERCED</u>	<u>2012.0476E</u>	<u>SFPUC-Sunset Pipeline ROW Vegetation Mgmt.</u>	<u>SFPUC-Sunset Pipeline ROW Vegetation Mgmt.</u>
<u>LAKE MERCED</u>	<u>2013.0260E</u>	<u>SFPUC-Lake Merced Pump Station</u>	<u>SFPUC-Lake Merced Pump Station</u>
<u>MT. DAVIDSON PARK</u>	<u>2010.1125E</u>	<u>RPD-Mt. Davidson Park</u>	<u>RPD-Mt. Davidson Park trail restoration</u>
<u>MT. DAVIDSON PARK</u>	<u>2012.1441E</u>	<u>RPD-Brush removal/trail access at four natural areas</u>	<u>Remove nonnative invasive plant material at Mt. Davidson trails and ROW near Dalewood and La Bica Ways; Corona Heights steep north slopes; Twin Peaks Blvd. southeast side; and Bayview Hill Key Ave. extension.</u>
<u>PALOU/PHELPS MINI PARK</u>	<u>2011.0148E</u>	<u>RPD-Minnie Lovie Playfield Renovation</u>	<u>The proposed project is the renovation and field improvements to the Minnie-Lovie Park. Renovations include: replacement of fences, replacement of bleachers, modify the retaining walls, install new drinking fountains, upgrade the irrigation system, and other minor improvements.</u>
<u>PINE LAKE PARK</u>	<u>2011.0378E</u>	<u>RPD-Stern Grove/Pine Lake/Parkside Tree Abatement</u>	<u>RPD-Stern Grove/Pine Lake/Parkside Tree Abatement and Pruning</u>
<u>PINE LAKE PARK</u>	<u>2012.0011E</u>	<u>RPD-Park Side Square Restroom Replacement</u>	<u>RPD-Park Side Square Restroom Replacement</u>
<u>ROCK OUTCROPPING</u>	<u>2010.0264E</u>	<u>RPD-Grandview Park Restoration Work</u>	<u>Repair existing retaining walls, restore trail, provide new protective fencing, provide soil erosion control measures, and native plant restoration.</u>
<u>TWIN PEAKS</u>	<u>2014-002827ENV</u>	<u>Twin Peaks Radio Tower Replacement</u>	<u>Replace Tower #3 with new tower (#6) adjacent to #3. Tower #3 would be demolished within six months of the successful transfer of service to #6.</u>
<u>TWIN PEAKS</u>	<u>2013.1712E</u>	<u>RPD-GG Park Replanting Project</u>	<u>Replanting project at GG Park-EEA dated 11/05/13</u>
<u>VARIOUS</u>	<u>2011.1359E</u>	<u>RPD-GO Bond Addendum \$160 Million</u>	<u>Various improvement park projects throughout SF.</u>

San Francisco Related Cumulative Projects List (Since 2009)			
<i>Natural Area</i>	<i>Case No.</i>	<i>Project Name</i>	<i>Description</i>
Other SF Projects			
<u>AT SHARP PARK</u>		<u>Sharp Park Safety, Infrastructure Improvement, and Habitat Enhancement Project</u>	<u>The project consists of construction of a 1,600 sf perennial pond located approximately 500 feet southeast of Horse Stable Pond (HSP); realignment of a portion of an existing golf cart path located west of the fairway for golf course hold number 15; removal of sediment and emergent vegetation within HSP and the connecting channel that links HSP with Laguna Salada; construction of steps and a maintenance walkway at the existing HSP pumphouse; and replacement of a wooden retaining wall with a concrete retaining wall at the existing HSP pumphouse. The proposed project is being constructed consistent with a Biological Opinion issued by the U.S. Fish and Wildlife Service and is separate and independent from the proposed SNRAMP project, which is the subject of this EIR. The Final MND was adopted in January 2014.</u>
<u>AT LAKE MERCED</u>		<u>Vista Grande Drainage Improvement Project</u>	<u>Daly City is proposing the Vista Grande project to address storm-related flooding that currently occurs in the Vista Grande Drainage Basin and to provide other environmental benefits, including restoration and management of water levels within Lake Merced. Lake Merced is made up of four individual but connected lakes (East, North, South, and Impound Lakes) and is owned by the City and County of San Francisco. The design of this project has implications for Impound Lake and the water levels around Lake Merced, which will be evaluated in the EIR from the perspective of project-related and cumulative impacts. The SFPUC maintains the lake as a non-potable emergency water supply for the San Francisco. An NOP/NOI was issued in February 2013, but the Draft EIR/EIS has not yet been released.</u>
<u>AT LAKE MERCED</u>		<u>San Francisco Groundwater Supply Project</u>	<u>The San Francisco Groundwater Supply Project would diversify San Francisco's water supply sources by building or converting up to six deep-water wells and associated treatment facilities around San Francisco, including a well at Lake Merced. Groundwater pumped from these wells would be blended with Hetch Hetchy water at the Sunset and Sutro reservoirs and then distributed throughout the city using existing infrastructure. The project includes construction and operation of a well facility at the Lake Merced Pump Station, to the east of the project site, and five additional well facilities and distribution pipelines to the north of the project site. The purpose of the project is to provide an average of up to 4 million gallons per day (mgd) of groundwater to augment San Francisco's municipal water supply. The Final EIR was certified in December 2013 and adopted by the SFPUC in January 2014.</u>
<u>AT LAKE MERCED</u>		<u>Pacific Rod and Gun Club Upland Soil Remedial Action Project</u>	<u>The San Francisco Public Utilities Commission (SFPUC) implemented the Pacific Rod and Gun Club Upland Soil Remedial Action Plan, which cleaned up soil contamination at the Pacific Rod and Gun Club (PRGC), located on the southwest side of Lake Merced in San Francisco, California. Soil contamination was the result of the former use of lead shot and clay targets made with asphaltic materials at the skeet and trap shooting ranges. The SFPUC prepared the PRGC Remedial Action Plan in response to a Cleanup Order issued by the California Regional Water Quality Control Board, San Francisco Bay Region. The project consisted of excavation and appropriate off-site disposal of up to 46,500 cubic yards of soil containing elevated concentrations of lead and polycyclic aromatic hydrocarbons and backfilling of excavation areas with clean fill material. The Final MND was adopted in June 2014.</u>

San Francisco Related Cumulative Projects List (Since 2009)

<i>Natural Area</i>	<i>Case No.</i>	<i>Project Name</i>	<i>Description</i>
<u>NEAR SHARP PARK AND LAKE MERCED</u>		<u>Golden Gate National Recreation Area General Management Plan</u>	<u>The plan creates the vision and framework to guide management of the park for the next 20 years, including land use policies. Plan activities near Fort Funston and Milagra Ridge, which are the two GGNRA areas within 1/4 mile of the SNRAMP (at Lake Merced and Sharp Park, respectively). At Fort Funston, the majority of the site would be managed to provide recreational activities in a more natural setting with limited support facilities. Access and parking would be at the edge of the site, allowing restoration of the natural dune ecosystem and providing trail access. Nonhistoric structures would be removed; existing park operation functions and the environmental education program would be relocated to suitable locations elsewhere in the park. The historic Battery Davis would be preserved within the context of the natural setting. The coastal bluffs would be preserved for their unique geology and to allow natural processes to continue unimpeded. At Milagra Ridge, the land would be managed to preserve the wild character of the area and protect endangered species habitat. Disturbed areas would be restored. Coordinating with other land managers, the National Park Service would also make trail improvements that could include connections to Oceana Boulevard, the Pacific coast, Skyline boulevard, and Sweeney Ridge. The ROD for the EIS was signed in April 2014. This project is different than the GGNRA Dog Management Plan, which focuses on the manner and extent of dog walking in appropriate areas of the park.</u>

5.B.12 Draft EIR New Appendix K

A new Appendix K is added to the EIR to include visitor use data collected in 2009 and 2011 at various DPAs, including those in the Bernal Heights, McLaren Park, and Lake Merced Natural Areas.

Dog Play Area Counts

<u>Name of DPA</u>	<u>Date of Visit</u>	<u>Time Visit Began</u>	<u>Time Visit Ended</u>	<u>Dogs</u>	<u>Owners</u>	<u>Dog Walkers</u>	<u>Notes</u>
<u>Alamo Square</u>	<u>6/11/2009</u>	<u>11:45 AM</u>	<u>12:00 PM</u>	<u>22</u>	<u>10</u>	<u>unclear how many are walkers</u>	<u>no indication if owners or walkers</u>
<u>Alamo Square</u>	<u>6/11/2009</u>	<u>12:30 PM</u>	<u>12:45 PM</u>	<u>12</u>	<u>0</u>	<u>14</u>	
<u>Alta Plaza</u>	<u>6/9/2009</u>	<u>9:58 AM</u>	<u>10:13 AM</u>	<u>12</u>	<u>6</u>	<u>1</u>	
<u>Alta Plaza</u>	<u>6/9/2009</u>	<u>10:45 AM</u>	<u>11:00 AM</u>	<u>11</u>	<u>6</u>	<u>1</u>	
<u>Bernal Heights</u>	<u>6/24/2009</u>	<u>1:00 PM</u>	<u>1:15 PM</u>	<u>9</u>	<u>3</u>	<u>2</u>	
<u>Bernal Heights</u>	<u>6/24/2009</u>	<u>1:30 PM</u>	<u>1:45 PM</u>	<u>21</u>	<u>6</u>	<u>1</u>	
<u>Brotherhood Mini Park</u>	<u>7/1/2009</u>	<u>2:37 PM</u>	<u>2:52 PM</u>	<u>6</u>	<u>2</u>	<u>0</u>	
<u>Buena Vista</u>	<u>6/11/2009</u>	<u>1:15 PM</u>	<u>1:30 PM</u>	<u>12</u>	<u>6</u>	<u>1</u>	
<u>Buena Vista</u>	<u>6/11/2009</u>	<u>1:45 PM</u>	<u>2:00 PM</u>	<u>13</u>	<u>4</u>	<u>1</u>	
<u>Buena Vista</u>	<u>6/24/2009</u>	<u>6:00 PM</u>	<u>6:15 PM</u>	<u>6</u>	<u>7</u>	<u>0</u>	
<u>Corona Heights</u>	<u>6/11/2009</u>	<u>2:30 PM</u>	<u>2:45 PM</u>	<u>17</u>	<u>5</u>	<u>2</u>	
<u>Corona Heights</u>	<u>6/11/2009</u>	<u>3:00 PM</u>	<u>3:15 PM</u>	<u>3</u>	<u>3</u>	<u>0</u>	
<u>Corona Heights</u>	<u>6/24/2009</u>	<u>6:25 PM</u>	<u>6:40 PM</u>	<u>12</u>	<u>13</u>	<u>0</u>	
<u>Crocker Amazon</u>	<u>7/2/2009</u>	<u>4:15 PM</u>	<u>4:30 PM</u>	<u>12</u>	<u>8</u>	<u>0</u>	
<u>Crocker Amazon</u>	<u>7/2/2009</u>	<u>4:45 PM</u>	<u>5:00 PM</u>	<u>3</u>	<u>3</u>	<u>0</u>	
<u>Crocker Amazon</u>	<u>7/30/2009</u>	<u>5:15 PM</u>	<u>5:30 PM</u>	<u>1</u>	<u>1</u>	<u>0</u>	
<u>Douglass</u>	<u>7/7/2009</u>	<u>2:37 PM</u>	<u>2:52 PM</u>	<u>39</u>	<u>4</u>	<u>6</u>	
<u>Douglass Playground</u>	<u>7/7/2009</u>	<u>3:15 PM</u>	<u>3:30 PM</u>	<u>16</u>	<u>10</u>	<u>0</u>	
<u>Douglass Playground</u>	<u>6/24/2009</u>	<u>5:20 PM</u>	<u>5:35 PM</u>	<u>18</u>	<u>18</u>	<u>0</u>	
<u>Duboce Park</u>	<u>6/11/2009</u>	<u>2:10 PM</u>	<u>2:25 PM</u>	<u>17</u>	<u>15</u>	<u>0</u>	
<u>Duboce Park</u>	<u>6/11/2009</u>	<u>2:45 PM</u>	<u>3:00 PM</u>	<u>21</u>	<u>12</u>	<u>0</u>	
<u>Duboce Park</u>	<u>unknown date in 2009</u>	<u>7:00 PM</u>	<u>7:15 PM</u>	<u>19</u>	<u>18</u>	<u>0</u>	
<u>Eureka Valley</u>	<u>6/24/2009</u>	<u>4:05 PM</u>	<u>4:20 PM</u>	<u>12</u>	<u>11</u>	<u>unclear how many were walkers</u>	<u>no indication if owners or walkers</u>

<u>Name of DPA</u>	<u>Date of Visit</u>	<u>Time Visit Began</u>	<u>Time Visit Ended</u>	<u>Dogs</u>	<u>Owners</u>	<u>Dog Walkers</u>	<u>Notes</u>
<u>Eureka Valley</u>	<u>6/24/2009</u>	<u>4:30 PM</u>	<u>4:45 PM</u>	<u>10</u>	<u>14</u>	<u>unclear how many were walkers</u>	<u>no indication if owners or walkers</u>
<u>Eureka Valley</u>	<u>6/24/2009</u>	<u>7:05 PM</u>	<u>7:20 PM</u>	<u>4</u>	<u>6</u>	<u>0</u>	
<u>GGP A</u>	<u>7/6/2009</u>	<u>12:18 PM</u>	<u>12:33 PM</u>	<u>0</u>	<u>0</u>	<u>0</u>	
<u>GGP A</u>	<u>7/6/2009</u>	<u>1:00 PM</u>	<u>1:15 PM</u>	<u>1</u>	<u>2</u>	<u>0</u>	
<u>GGP B SE</u>	<u>7/13/2009</u>	<u>5:00 PM</u>	<u>5:15 PM</u>	<u>4</u>	<u>3</u>	<u>0</u>	
<u>GGP Big Rec</u>	<u>7/8/2009</u>	<u>11:00 AM</u>	<u>11:15 AM</u>	<u>1</u>	<u>1</u>	<u>0</u>	
<u>GGP Big Rec</u>	<u>7/8/2009</u>	<u>11:45 AM</u>	<u>12:00 PM</u>	<u>6</u>	<u>6</u>	<u>0</u>	
<u>GGP Big Rec</u>	<u>7/13/2009</u>	<u>5:15 PM</u>	<u>5:30 PM</u>	<u>18</u>	<u>17</u>	<u>0</u>	
<u>GGP D SW</u>	<u>7/6/2009</u>	<u>1:37 PM</u>	<u>1:52 PM</u>	<u>0</u>	<u>0</u>	<u>0</u>	
<u>GGP D SW</u>	<u>7/6/2009</u>	<u>1:53 PM</u>	<u>2:08 PM</u>	<u>1</u>	<u>2</u>	<u>0</u>	
<u>GGP D SW</u>	<u>7/8/2009</u>	<u>1:00 PM</u>	<u>1:15 PM</u>	<u>1</u>	<u>1</u>		
<u>GGP D SW</u>	<u>7/8/2009</u>	<u>1:45 PM</u>	<u>2:00 PM</u>	<u>0</u>	<u>0</u>		
<u>GGP Dog Training</u>	<u>7/9/2009</u>	<u>1:45 PM</u>	<u>2:00 PM</u>	<u>45</u>	<u>7</u>	<u>6</u>	
<u>GGP Dog Training</u>	<u>7/9/2009</u>	<u>2:30 PM</u>	<u>2:45 PM</u>	<u>30</u>	<u>4</u>	<u>4</u>	
<u>Jefferson Square</u>	<u>6/9/2009</u>	<u>2:20 PM</u>	<u>2:35 PM</u>	<u>6</u>	<u>4</u>	<u>0</u>	
<u>Jefferson Square</u>	<u>6/9/2009</u>	<u>2:35 PM</u>	<u>2:50 PM</u>	<u>0</u>	<u>0</u>	<u>0</u>	
<u>Jefferson Square</u>	<u>6/10/2009</u>	<u>6:35 PM</u>	<u>6:50 PM</u>	<u>6</u>	<u>5</u>	<u>0</u>	
<u>John McLaren</u>	<u>7/2/2009</u>	<u>3:25 PM</u>	<u>3:40 PM</u>	<u>10</u>	<u>2</u>	<u>1</u>	
<u>John McLaren</u>	<u>7/2/2009</u>	<u>3:45 PM</u>	<u>4:00 PM</u>	<u>0</u>	<u>0</u>	<u>0</u>	
<u>John McLaren</u>	<u>7/30/2009</u>	<u>4:50 PM</u>	<u>5:05 PM</u>	<u>9</u>	<u>5</u>	<u>0</u>	
<u>Lafayette Park</u>	<u>6/9/2009</u>	<u>12:30 PM</u>	<u>12:45 PM</u>	<u>6</u>	<u>6</u>	<u>0</u>	
<u>Lafayette Park</u>	<u>6/9/2009</u>	<u>1:25 PM</u>	<u>1:40 PM</u>	<u>0</u>	<u>0</u>	<u>0</u>	
<u>Lake Merced</u>	<u>9/7/2011</u>	<u>1:15 PM</u>	<u>2:15 PM</u>	<u>1</u>	<u>1</u>	<u>0</u>	
<u>Lake Merced</u>	<u>11/11/2011</u>	<u>7:45 AM</u>	<u>8:15 AM</u>	<u>0</u>	<u>0</u>	<u>0</u>	
<u>Lake Merced</u>	<u>11/10/2011</u>	<u>8:45 AM</u>	<u>9:45 AM</u>	<u>0</u>	<u>0</u>	<u>0</u>	
<u>Mission Dolores</u>	<u>6/24/2009</u>	<u>3:00 PM</u>	<u>3:15 PM</u>	<u>17</u>	<u>15</u>	<u>0</u>	
<u>Mission Dolores</u>	<u>6/24/2009</u>	<u>3:30 PM</u>	<u>3:45 PM</u>	<u>23</u>	<u>16</u>	<u>0</u>	
<u>Mountain Lake</u>	<u>6/9/2009</u>	<u>8:08 AM</u>	<u>8:23 AM</u>	<u>11</u>	<u>10</u>	<u>0</u>	

<u>Name of DPA</u>	<u>Date of Visit</u>	<u>Time Visit Began</u>	<u>Time Visit Ended</u>	<u>Dogs</u>	<u>Owners</u>	<u>Dog Walkers</u>	<u>Notes</u>
Mountain Lake	6/9/2009	9:00 AM	9:15 AM	9	10	unclear how many are walkers	unclear how many are walkers
Pine Lake	6/26/2009	3:10 PM	3:25 PM	41	30	1	
Pine Lake	6/26/2009	4:25 PM	4:40 PM	43	21	4	
Pine Lake	7/1/2009	5:00 PM	5:15 PM	38	32	0	
St. Mary's Playground	6/29/2009	1:30 PM	1:45 PM	2	1	0	
St. Mary's Playground	6/29/2009	2:00 PM	2:15 PM	18	6	2	
Stern Grove	6/26/2009	2:30 PM	2:45 PM	3	2	0	
Stern Grove	6/26/2009	3:54 PM	4:04 PM	3	3	0	
Stern Grove	7/1/2009	5:30 PM	5:45 PM	1	1	0	
Upper Noe Valley	6/9/2009	3:46 PM	4:01 PM	8	7		
Upper Noe Valley	6/9/2009	4:30 PM	4:45 PM	12	8	0	
Walter Haas	7/7/2009	1:20 PM	1:35 PM	22	3	4	
Walter Haas	7/7/2009	2:00 PM	2:15 PM	13	3	2	

Natural Area DPAs with Proposed Changes

	<i>Average 15 minutes</i>		<i>Total Recorded</i>			<i>Estimated Hourly</i>	
	<i>Dogs</i>	<i>Walkers</i>	<i>Dogs</i>	<i>Owners</i>	<i>Time</i>	<i>Dogs</i>	<i>Owners</i>
Bernal Heights	15	5	30	9	30 min	60	18
John McLaren	6	2	19	7	45 min	25	9
Lake Merced	0	0	1	1	45 min	1	1

Natural Area DPAs with No Changes

	<i>Average 15 minutes</i>		<i>Total Recorded</i>			<i>Estimated Hourly</i>	
	<i>Dogs</i>	<i>Walkers</i>	<i>Dogs</i>	<i>Owners</i>	<i>Time</i>	<i>Dogs</i>	<i>Owners</i>
Buena Vista	10	6	31	17	45 min	41	23
Corona Heights	11	7	32	21	45 min	43	28
Mountain Lake	10	10	20	20	30 min	40	40
Pine Lake	41	28	122	83	45 min	162	110
Stern Grove	2	2	7	6	45 min	9	8

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