



SAN FRANCISCO PLANNING DEPARTMENT

Notice of Availability of and Intent to Adopt a Mitigated Negative Declaration

Date: September 18, 2013
Case No.: 2012.1427E
Project Title: Sharp Park Safety, Infrastructure Improvement,
and Habitat Enhancement Project
Project Location: Sharp Park
Project Sponsor: San Francisco Recreation and Park Department (SFRPD)
Karen Mauney-Brodek – (415) 575-5601
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To Whom It May Concern:

This notice is to inform you of the availability of the environmental review document concerning the proposed project described below. The document is a preliminary mitigated negative declaration (PMND), containing information about the possible environmental effects of the proposed project. The PMND documents the determination of the Planning Department that the proposed project could not have a significant adverse effect on the environment. Preparation of a mitigated negative declaration does not indicate a decision by the City to carry out or not to carry out the proposed project.

Project Description: The project site is located within Sharp Park in the City of Pacifica in San Mateo County. Sharp Park is a public park, approximately 417 acres in size, that is owned and operated by the City and County of San Francisco's (CCSF's) Recreation and Park Department (SFRPD). The proposed project consists of: 1) construction of a perennial pond, approximately 1,600 sf in size, located approximately 400 to 500 feet southeast of Horse Stable Pond (HSP); 2) realignment of a portion of an existing golf cart path located west of the fairway for golf course hole number 14 and east of the tee box for golf course hole number 15; 3) removal of sediment and emergent vegetation within HSP and the connecting channel that links HSP with Laguna Salada (LS); 4) construction of a maintenance walkway approximately 4.6 feet in width at the existing HSP pumphouse; 5) replacement of a wooden retaining wall near the pumphouse with a concrete retaining wall at the existing HSP pumphouse; and 6) construction of steps from the access road to the existing HSP pumphouse.

The project would be implemented in two locations, which cover a total of 35,000 noncontiguous square feet (sf) within Sharp Park. The majority of work would be located on the southwest corner of the existing golf course, near HSP. One segment of an existing golf cart path is proposed to be realigned as part of this project. This golf cart path segment is located to the northeast of LS and to the southwest of Lakeside Avenue.

The proposed project is being constructed in accordance with a Biological Opinion issued by the U.S. Fish and Wildlife Service (USFWS) and is separate and independent from the proposed Significant Natural Resource Areas Management Plan (SNRAMP), which is currently undergoing separate environmental review.

The PMND is available to view or download from the Planning Department's Negative Declarations and EIRs web page (<http://tinyurl.com/sfceqadocs>). Paper copies are also available at the Planning Information Center (PIC) counter on the first floor of 1660 Mission Street, San Francisco.

If you have questions concerning environmental review of the proposed project, contact the Planning Department staff contact listed above. Within 30 calendar days following publication of the PMND (i.e., by 5:00 p.m. on **October 18, 2013**), any person may:

- 1) Review the PMND as an informational item and take no action;
- 2) Make recommendations for amending the text of the document. The text of the PMND may be amended to clarify or correct statements and may be expanded to include additional relevant issues or to cover issues in greater depth. This may be done **without** the appeal described below; **OR**
- 3) Appeal the determination of no significant effect on the environment to the Planning Commission in a letter which specifies the grounds for such appeal, accompanied by a \$534 check payable to the San Francisco Planning Department.¹ An appeal requires the Planning Commission to determine whether or not an Environmental Impact Report must be prepared based upon whether or not the proposed project could cause a substantial adverse change in the environment. Send the appeal letter to the Planning Department, Attention: Sarah B. Jones, 1650 Mission Street, Suite 400, San Francisco, CA 94103. **The letter must be accompanied by a check in the amount of \$534.00 payable to the San Francisco Planning Department, and must be received by 5:00 p.m. on October 18, 2013.** The appeal letter and check may also be presented in person at the Planning Information Center (PIC) counter on the first floor of 1660 Mission Street, San Francisco.

In the absence of an appeal to the Planning Commission, the mitigated negative declaration shall be made final, subject to necessary modifications, after 30 days from the date of publication of the PMND. In addition, in the absence of an appeal to the Planning Commission, there may be no further appeal rights to the Board of Supervisors.

Members of the public are not required to provide personal identifying information when they communicate with the Commission or the Department. All written or oral communications, including submitted personal contact information, may be made available to the public for inspection and copying upon request and may appear on the Department's website or in other public documents.

¹ Upon review by the Planning Department, the appeal fee may be reimbursed for neighborhood organizations that have been in existence for a minimum of 24 months.



SAN FRANCISCO PLANNING DEPARTMENT

Preliminary Mitigated Negative Declaration

Date: **September 18, 2013**
Case No.: **2012.1427E**
Project Address: **Sharp Park Safety, Infrastructure Improvement,
and Habitat Enhancement Project**
Project Location: **Sharp Park**
Project Sponsor: **San Francisco Recreation and Parks Department (SFRPD)
Karen Mauney-Brodek – (415) 575-5601
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Staff Contact: **Kei Zushi - (415) 575-9036
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PROJECT DESCRIPTION:

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The project would be implemented in two locations, which cover a total of 35,000 noncontiguous square feet (sf) within Sharp Park. The majority of work would be located on the southwest corner of the existing golf course, near HSP. One segment of an existing golf cart path is proposed to be realigned as part of this project. This golf cart path segment is located to the northeast of LS and to the southwest of Lakeside Avenue.

The proposed project is being constructed in accordance with a Biological Opinion issued by the U.S. Fish and Wildlife Service (USFWS) and is separate and independent from the proposed Significant Natural Resource Areas Management Plan (SNRAMP), which is currently undergoing separate environmental review.

The Approval by the San Francisco Recreation and Park Commission is the Approval Action for the whole of the proposed project.

FINDING:

This project could not have a significant effect on the environment. This finding is based upon the criteria of the Guidelines of the State Secretary for Resources, Sections 15064 (Determining Significant Effect), 15065 (Mandatory Findings of Significance), and 15070 (Decision to prepare a Negative Declaration), and the following reasons as documented in the Initial Evaluation (Initial Study) for the project, which is attached.

Mitigation measures are included in this project to avoid potentially significant effects. See pages 108 and 116.

cc: Karen Mauney-Brodek, Project Contact
Historic Preservation Distribution List

Distribution List
Virna Byrd, M.D.F

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INITIAL STUDY

Case No. 2012.1427E – Sharp Park Safety, Infrastructure Improvement, and Habitat Enhancement Project

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A. PROJECT DESCRIPTION

Project Location and Site Characteristics

Sharp Park is a public park, approximately 417 acres in size, located in the City of Pacifica in San Mateo County that is owned and operated by the City and County of San Francisco's (CCSF's) Recreation and Park Department (SFRPD). It is bisected from north to south by the Pacific Coast Highway (PCH), with the project site located west of PCH. Sharp Park is bounded by the Pacific Ocean to the west. To the north and south, portions of Sharp Park are bordered by residential development. Sharp Park abuts portions of the Golden Gate National Recreation Area (GGNRA) to the south and east (see Figures 1 and 2). Sharp Park contains an 18-hole golf course, an archery range, a clubhouse, a remediated former rifle range, a parking lot, and extensive natural areas including an approximately 27-acre wetland complex consisting of Horse Stable Pond (HSP), Laguna Salada (LS), a channel and culverts that connect HSP to LS, and adjacent wetlands.

The SFRPD, as project sponsor, proposes to implement the project in two locations, which cover a total of 35,000 noncontiguous square feet (sf) within Sharp Park. The majority of work would be located on the southwest corner of the existing golf course, near HSP. One segment of an existing golf cart path is proposed to be realigned as part of this project. This golf cart path segment is located to the northeast of LS and to the southwest of Lakeside Avenue (see Figure 3).

The Sharp Park Golf Course is located within an 845-acre watershed.¹ HSP is located south of LS and consists of an open water pond and a freshwater wetland. It is connected to LS via an approximately 1,000-foot-long channel that was constructed to drain water from the lagoon to HSP, and together these three features form a wetland complex. In addition to water from LS, HSP receives water from Sanchez Creek from the east (see Figure 4). HSP is shallower and smaller than LS, and typical water depths range from one to three feet. Flood waters in the wetland complex are drained by pumps located at the southwest corner of HSP, which pump water into the Pacific Ocean during the winter, when water levels in the pond become too high.

The LS 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 HSP and LS represents the groundwater table. Groundwater flow from the watershed to the ocean maintains HSP elevations above sea level. Over the course of the year, surface inflows to LS exceed groundwater inflows to LS 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.²

There is a seawall located along the western boundary of Sharp Park. This seawall was originally constructed between 1941 and 1952 and eliminated the historic hydrologic connection between the Pacific Ocean and the wetland complex. The aforementioned pumps control water levels in HSP and may affect water levels in LS when the channel connecting the two water bodies creates a surface water connection between them. The existing pump system consists of a large pump (rated 10,000 gallons per minute) and a small pump (rated 1,500 gallons per minute) located in a

¹ 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"). This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

² Kamman Hydrology & Engineering, Inc. *Report for the Hydrologic Assessment and Ecological Enhancement Feasibility Study: Laguna Salada Wetland System, Pacifica, California, Prepared For: Tetra Tech, Inc.*, March 30, 2009 ("Hydrologic Assessment"). This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

pumphouse with pipes built through the seawall to an outfall. Operation of the flood control pump system is necessary to manage floodwaters both on Sharp Park and adjacent properties. During normal rainfall years, floodwaters into LS back up onto the golf course.^{3,4}

Two factors adversely affect the operation of the pumps. First, pump operation is impaired by sediment buildup and vegetation growth around the pump intake structure and along the connecting channel between HSP and LS. Second, pump operation is impaired by the buildup of vegetation on the pump intake screens. In order for the pumps to function properly, the existing screens at the intake must be kept clear of vegetation buildup. The maintenance of the screens, including the removal of debris buildup, can be required as frequently as daily during the rainy season. Such maintenance often occurs while the pumps are being operated during or immediately after storm events when poor visibility, slippery conditions, and high water levels present hazards to maintenance workers. Currently, there is no safe walking and working surface, and maintenance workers have to lift a piece of chain link fence to access the screens for cleaning.⁵

In November 2008, a wetland delineation report was prepared in support of the proposed LS Wetland Restoration and Habitat Recovery Project.⁶ The study area for the wetland delineation report included HSP, LS, and areas of the Sharp Park Golf Course adjacent to the lagoon. The report concluded that a total of 27.42 acres of waters of the U.S.⁷ were delineated within the study area. Jurisdictional areas were classified into four habitat types: freshwater marsh, willow scrub, wet meadow, and unvegetated pond (open water) (see Sections E.13, Biological Resources for more information). In May 2013, another wetland delineation report was prepared by the SFRPD to evaluate wetlands located in the proposed project area that meet the California Coastal Commission (CCC)-only wetland criteria.^{8,9}

There are several special-status species¹⁰ that are known to occur on and near the project site. These species include the California red-legged frog (CRLF), San Francisco garter snake (SFGS), western pond turtle (WPT), salt marsh common yellowthroat, black-crowned night heron, and

³ Arup North America. *Sharp Park Sea Wall Evaluation*, February 5, 2010. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

⁴ USFWS. *Biological Opinion*. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

⁵ Ibid.

⁶ Tetra Tech, Inc. *Jurisdictional Waters of the US and Wetland Determination Report, Laguna Salada Wetland Restoration and Habitat Recovery Project*, November 2008 ("LS Wetland Determination Report"). This report is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

⁷ Under the Federal Clean Water Act (FCWA) Sections 404 and 401, "jurisdictional wetlands and waters of the U.S." include one of the following: 1) traditional navigable waters; 2) wetlands next to traditional navigable waters; 3) nonnavigable tributaries of traditional navigable waters that are relatively permanent, where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months); or 4) wetlands that directly abut the tributaries described in Item 3), above. See Section E.13, Biological Resources, for more information about the definition of "jurisdictional wetlands and waters of the U.S."

⁸ San Francisco Recreation and Park Department (SFRPD). *Single Parameter Wetland Delineation for the Sharp Park Pumphouse Safety, Infrastructure Improvement and Habitat Enhancement Project*, May 7, 2013 ("Single Parameter Wetland Delineation Report"). This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

⁹ See the discussion concerning the California Coastal Act under Section C, Compatibility with Existing Zoning and Plans, page 19, for the definition of CCC-only wetlands.

¹⁰ See Section E.13, Biological Resources, for the definition of "Special-Status Species."

San Francisco dusky-footed woodrat. CRLF is listed as “threatened” under the Federal Endangered Species Act (FESA) and a California Species of Special Concern (SSC).^{11,12} SFGS is listed as “endangered” under the FESA and classified as “endangered” and “fully protected” under the California Fish and Game Code.^{13,14,15,16,17} The black-crowned night heron is a California Special Animal.¹⁸ WPT, salt marsh common yellowthroat, and San Francisco dusky-footed woodrat are listed as a California SSC. The San Francisco dusky-footed woodrat is known to occur on the east side of PCH (see Section E.13, Biological Resources for more information).

Proposed Project

The proposed project includes elements that are required under a Biological Opinion issued by the U.S. Fish and Wildlife Service (USFWS)¹⁹ and consists of: 1) construction of a perennial pond approximately 1,600 sf in size; 2) realignment of a portion of an existing golf cart path located west of the fairway for golf course hole number 14 and east of the tee box for golf course hole number 15; 3) removal of sediment and emergent vegetation within HSP and the connecting channel that links HSP with LS; 4) construction of a maintenance walkway approximately 4.6 feet in width; 5) replacement of a wooden retaining wall near the pumphouse with a concrete retaining wall; and 6) construction of steps from the access road to the existing HSP pumphouse (see Figures 5 and 6).

¹¹ The Federal Endangered Species Act (FESA) defines “Threatened Species” as any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

¹² A Species of Special Concern (SSC) is a species, subspecies, or distinct population of an animal (fish, amphibian, reptile, bird, and mammal) native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- is extirpated from the State or, in the case of birds, in its primary seasonal or breeding role;
- is listed as Federally-, but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed;
- is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status;
- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.

¹³ The FESA defines “Endangered Species” as any species which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined by the Secretary to constitute a pest whose protection under the provisions of the FESA would present an overwhelming and overriding risk to man.

¹⁴ The California Fish and Game Code defines “Endangered Species” as a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease. Any species determined by the Fish and Game Commission as “endangered” on or before January 1, 1985, is an “endangered species.”

¹⁵ The classification of “Fully Protected” was the State’s initial effort in the 1960’s to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, mammals, amphibians and reptiles, birds and mammals. Most fully protected species have also been listed as threatened or endangered species under the more recent endangered species laws and regulations.

¹⁶ California Department of Fish and Wildlife (CDFW). *Fully Protected Animals*. Available online at: http://www.dfg.ca.gov/wildlife/nongame/t_e_spp/fully_pro.html. Accessed July 19, 2013.

¹⁷ CDFW. *State and Federally Listed Endangered & Threatened Animals of California*, January 2013. Available online at: <http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/TEAnimals.pdf>. Accessed July 19, 2013.

¹⁸ “Special Animals” is a general term that refers to all of the taxa the California Natural Diversity Database (CNDDB) is interested in tracking, regardless of their legal or protection status.

¹⁹ USFWS. *Biological Opinion*. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

The primary purposes of the proposed construction of a pond, golf cart path realignment, and sediment and vegetation removal are to: 1) restore habitat in several locations within the wetland complex for CRLF and SFGS; and 2) remove impediments to water flow within the wetland complex. The primary purposes of the proposed improvements to the pumphouse are to: 1) enhance access to the pump intake structure and improve the safety conditions of workers operating and maintaining the pumps; and 2) enhance existing habitat for CRLF and SFGS.

The following is a description of each element of the proposed project:

- 1) **Construction of a perennial pond.** An approximately 1,600-sf perennial pond would be constructed to provide habitat for CRLF. The proposed pond would be located approximately 400 to 500 feet to the southeast of HSP within Sharp Park (see Figure 5). The SFRPD has tentatively identified two possible locations for the proposed pond. The final specific location would be determined in consultation with the USFWS. The proposed pond would be constructed by excavating up to five feet in depth in a similar manner to nearby ponds recently completed by GGNRA. Depending on the results of hydrologic surveys to be conducted as part of this project, the pond may be lined with clay bentonite to prolong water retention. The pond would be designed to capture and hold surface water runoff in the immediate vicinity of the pond and may also be fed by groundwater.

Several types of plants would be removed and others planted in and near the proposed pond. The plants to be removed would primarily include invasive species such as poison hemlock (*Conium maculatum*), mustard, and annual grasses; however, some areas containing common native upland species such as coyote brush (*Baccharis pilularis*) and California aster (*Symphyotrichum chiloensis*) may also be affected. The pond margins would be planted with wetland species such as common rush (*Juncus effuses*), common threesquare (*Schoenoplectus pungens*) and common silverweed (*Potentilla anserina*) which would provide suitable attachment sites for CRLF egg masses. The uplands surrounding the pond would be revegetated with the grassland-scrub mosaic species which may include coastal sagebrush (*Artemisia pycnocephala*), sticky monkey flower (*Mimulus aurantiacus*), California aster and native grass species, which would provide high quality foraging and refuge habitat for CRLF and SFGS. The SFRPD would monitor the pond for CRLF breeding success by surveying for egg masses on an annual basis and would document habitat conditions for five years following pond construction.

- 2) **Golf cart path realignment.** One segment of an existing cart path, located west of the fairway for golf course hole number 14 and east of the tee box for golf course hole number 15, frequently floods, even during drought years. This golf cart path segment is located in low lying depression, which prevents surface water from draining into LS and causes surface water to pond on the path. This segment of the golf cart path, approximately 100 feet in length and seven feet in width, would be realigned to shift it 5 to 10 feet further away from habitat areas (see Figure 6). To maintain the natural look of the area adjacent to the cart path, the new path may be constructed using interlocking, permeable pavers.
- 3) **Removal of sediment and emergent vegetation within HSP and the connecting channel.** Sediment and emergent vegetation, including cattails (*Typha angustifolia*) and bulrush (*Scirpus americanus*), near the existing pumphouse would be removed in order to reduce obstructions to water flow into the pump intake structure and to enhance existing habitat for CRLF and SFGS (see Figure 5). HSP is approximately 5,900 sf in size, of which 2,350 sf is filled with cattails and bulrush. From this area, approximately 435 cubic yards (CYs) of sediment and emergent vegetation would be removed. The connecting channel

between HSP and LS is approximately 6,500 sf in size. This project would also remove approximately 480 CYs of sediment and emergent vegetation from the connecting channel. To facilitate the proposed sediment and emergent vegetation removal and to reduce potential impacts to CRLF, any of the following measures, or a combination of two or more of these measures, may be implemented in consultation with the USFWS: 1) lowering the water level of HSP and the connecting channel through the use of the existing pumps; 2) installing temporary barricades within the connecting channel to prevent the water from flowing into the work areas, or 3) utilizing suction hydraulic equipment to minimize the disturbance of sediments in the water.

The sediment and vegetation removal around the pumphouse would likely require establishing an equipment access route through the jurisdictional wetland on the north side of HSP. A compact multi-purpose aquatic vessel (i.e., an Aquamog) equipped with a long boom and clam shell or bucket type attachment that can reach sediment and vegetation may be used near the pumphouse. If it is determined in consultation with regulatory agencies that it is preferable to remove water from the work area around the pumphouse prior to sediment removal, then a small bobcat or similar equipment on tracks may be used to remove sediment. It is anticipated that an excavator or Grade-all stationed on the golf course would be used for the proposed sediment and emergent vegetation removal in the connecting channel.

Sediment and vegetation removed from both HSP and the connecting channel would be placed in an elevated dewatering container located in an adjacent cleared upland area or placed directly into a dump truck and transported to the former rifle range in the Upper Canyon of Sharp Park on the east side of PCH. The sediment and vegetation would be spread over flat grassland areas in the former rifle range. No dewatering vehicles or containers would be left overnight within work areas.

- 4) **Construction of a maintenance walkway.** The proposed maintenance walkway would be approximately 4.6 feet in width and wrap around the pump intake structure, and would be constructed in compliance with the California Uniform Building Code. The maintenance walkway would be made of wood and supported by approximately six concrete support structures to be placed in jurisdictional wetlands. The support structures for the proposed maintenance walkway would result in 1.2 CYs of fill in jurisdictional wetlands and waters of the U.S., which would require a permit from the U.S. Army Corps of Engineers (USACE). A new concrete slab (5 feet by 5 feet) and metal guardrail (3.5 feet in height and 3 feet in length) may be installed at the entrance door to the pumphouse. In addition, a secondary, metal debris screen would be installed at the pump intake structure in consultation with the USFWS.
- 5) **Replacement of an existing wooden retaining wall.** An existing wooden retaining wall located next to the pumphouse, approximately 12 feet in length and 3 feet in height, would be replaced with a new concrete retaining wall of the same size, in order to prevent upland soil from entering the water. The proposed retaining wall would be constructed in compliance with the California Uniform Building Code. The proposed retaining wall would result in 0.4 CYs of fill in jurisdictional wetlands and waters of the U.S., which would require a permit from the USACE (see Figure 5).
- 6) **Construction of steps.** The proposed project includes construction of 12 steps, approximately 3 feet in width and 14.3 feet in length, leading down the slope from the access road to the existing pumphouse. The proposed steps would be constructed in compliance with the California Uniform Building Code.

The proposed project would result in excavation up to a maximum of five feet below ground surface (bgs). Best Management Practices (BMPs) for erosion control would be implemented for all elements of the proposed project and may include placement of fiber rolls, silt fences, straw blankets, hydroseeding, and straw mulch/wood chips. In addition, the SFRPD would implement the following BMPs to control the spread of mosquito-borne disease as part of this project (see Impact HZ-2 for more information):

1. Educate staff about the most effective ways to avoid being bitten by mosquitoes;
2. Remove small water features that contain standing water or treat those features with *Bacillus thuringiensis israelis* a biological control agent for mosquito larvae, if the features were to remain and Public Health Services were to identify a potential health hazard; and
3. Encourage staff to drain any standing water in stored equipment or temporary depressions.

While the proposed activities associated with sediment and vegetation removal in HSP and the connecting channel and the native plant restoration associated with the construction of the pond are similar to those identified as long-term management goals in the SFRPD's proposed 2006 Significant Natural Resource Areas Management Plan (SNRAMP), this project is a separate and independent project to improve the habitat of the CRLF and SFGS in compliance with the USFWS Biological Opinion while improving the safety of workers who maintain the pumphouse. The proposed 2006 SNRAMP, which is currently undergoing environmental review, is a management plan intended to guide SFRPD's natural resource protection, habitat restoration, trail and access improvements, and maintenance activities over time and concerns all of the identified "natural areas" within the SFRPD's jurisdiction.

Although a neighborhood notice distributed on January 15, 2013 for the proposed project indicated that the project would include restoration of a half-acre upland habitat around the wetland complex, the Planning Department has since determined that the upland habitat restoration is separate, and has independent utility, from the proposed project. The upland habitat restoration, to remove invasive plant species and revegetate with native species on a total of 0.5 acres of upland area within Sharp Park, neither relies upon nor requires the approval of the proposed project. A Categorical Exemption (Planning Case No. 2013.1008E) was issued on August 5, 2013 concerning the upland habitat restoration pursuant to the California Environmental Quality Act (CEQA). The notice also indicated that two cart paths would be realigned. The SFRPD has decided to leave the southern cart segment in its current location and manually route carts onto the fairway as needed to avoid flooded areas.

A Biological Assessment²⁰ was prepared by the SFRPD and a Biological Opinion²¹ was issued by the USFWS for the proposed project. At the request of the USFWS, the Biological Assessment and Biological Opinion included the proposed project listed above, as well as the ongoing operations

²⁰ SFRPD. *Biological Assessment, Sharp Park Safety, Infrastructure Improvement and Habitat Enhancement Project*, May 2, 2012 ("Biological Assessment"). This Biological Assessment was amended on August 16, 2012. These documents are available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

²¹ USFWS. *Biological Opinion*. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

and maintenance of the golf course.²² Although ongoing golf course operations, such as pump management and operation, mowing, and golf cart use, are discussed in the Biological Opinion, these ongoing operations and maintenance activities are not considered part of the proposed project for purposes of this CEQA analysis, but rather are considered part of the existing, or baseline, conditions. No changes to golf course operations and maintenance, including operations of the pumps, are proposed as part of this project.

Construction activities are required to be undertaken between June 1 and October 31 to minimize the proposed project's impact to CRLF and SFGS in accordance with the Biological Opinion. Construction is anticipated to occur for approximately 60 days over 18 months in the appropriate construction window in accordance with the Biological Opinion. Workers for the proposed project would include up to three to ten SFRPD employees and contractors.

The Biological Opinion includes a number of Conservation Measures and Terms and Conditions, intended to minimize the project's impacts to CRLF and SFGS. These Conservation Measures and Terms and Conditions are included as mitigation measures for this project (see Section E.13, Biological Resources for more information).

Project Approvals Required

The proposed project would require the following project approvals, with the Approval by the San Francisco Recreation and Park Commission identified as the Approval Action for the whole of the proposed project:

- Approval by the San Francisco Recreation and Park Commission
- FESA Section 7 formal consultation, Biological Opinion, and Incidental Take Statement Approval by the USFWS²³
- California Endangered Species Act (CESA) consultation with the California Department of Fish and Wildlife (CDFW)²⁴ concerning fully protected species (i.e., SFGS)
- Federal Clean Water Act (FCWA) Section 404 Approval by the USACE
- FCWA Section 401 Water Quality Certification Approval by the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB)
- Fish and Game Code Section 1602 Lake or Streambed Alteration Agreement Approval by the CDFW
- Coastal Development Permit Approval by the CCC

In addition, the proposed project may require the following project approval:

- Approval of an amended National Pollution Discharge Elimination System (NPDES) Permit by SFBRWQCB

²² The proposed project is part of the project for which the Biological Opinion was issued by the USFWS. The proposed project, except for the construction of a 1,600-sf pond, is outlined under "Construction Action" on pages 5 and 6 of the Biological Opinion. The proposed construction of a 1,600-sf pond is outlined under "Conservation Measures for Golf Course Maintenance and Operations" on page 19 of the Biological Opinion.

²³ A Biological Opinion including an Incidental Take Statement has been issued by the USFWS for the proposed project.

²⁴ Formerly known as the California Department of Fish and Game (CDFG)

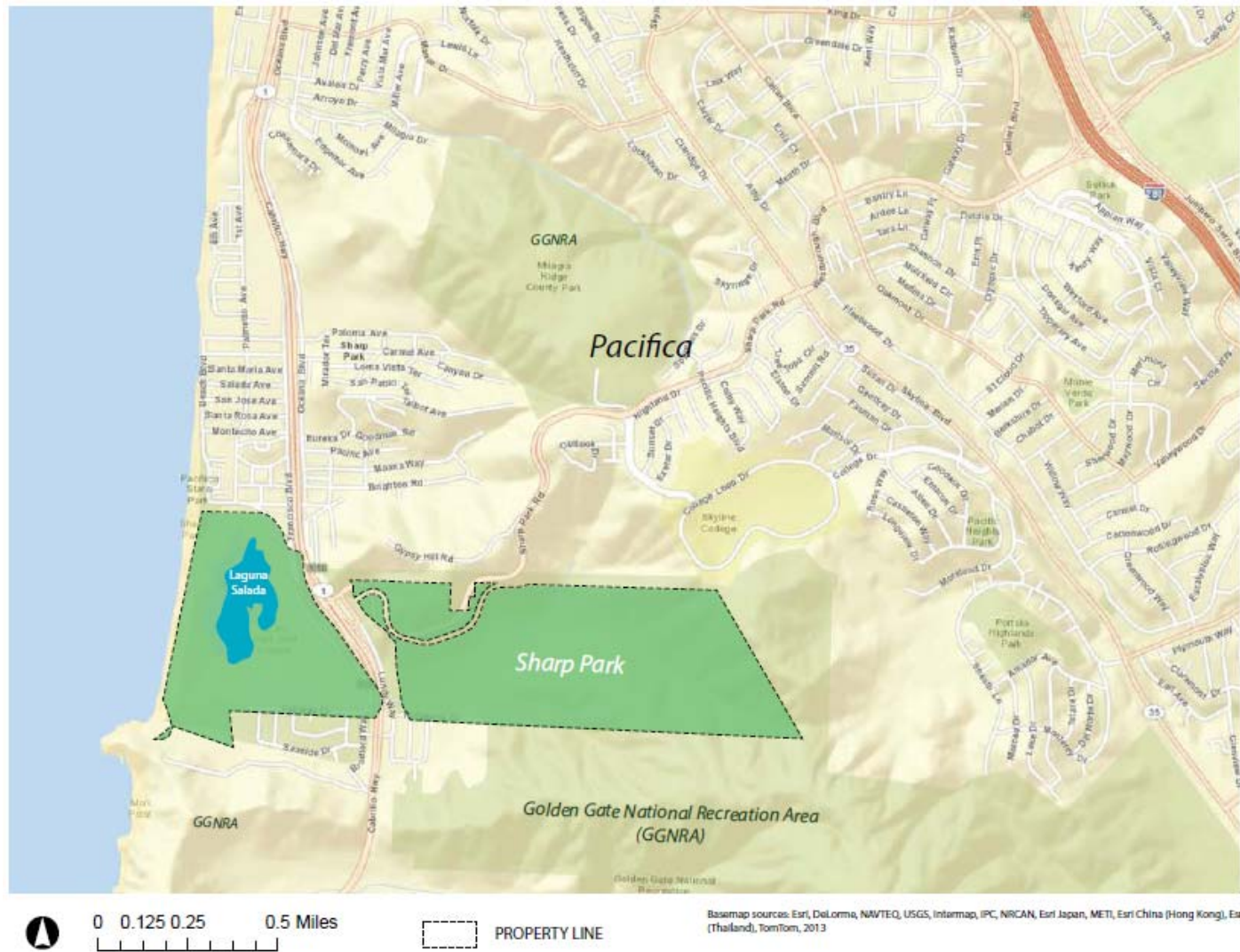


Figure 1. Vicinity Map
Source: San Francisco Recreation and Park Department



Figure 2. Map of Sharp Park and Golf Course
Source: San Francisco Recreation and Park Department



Figure 3. Location of Proposed Project

Source: San Francisco Recreation and Park Department



Figure 4. Drainage Network Map²⁵
Source: Kamman Hydrology & Engineering, Inc.

²⁵ Kamman Hydrology & Engineering, Inc. *Hydrologic Assessment*. This report is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.



Basemap sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo and the GIS User Community

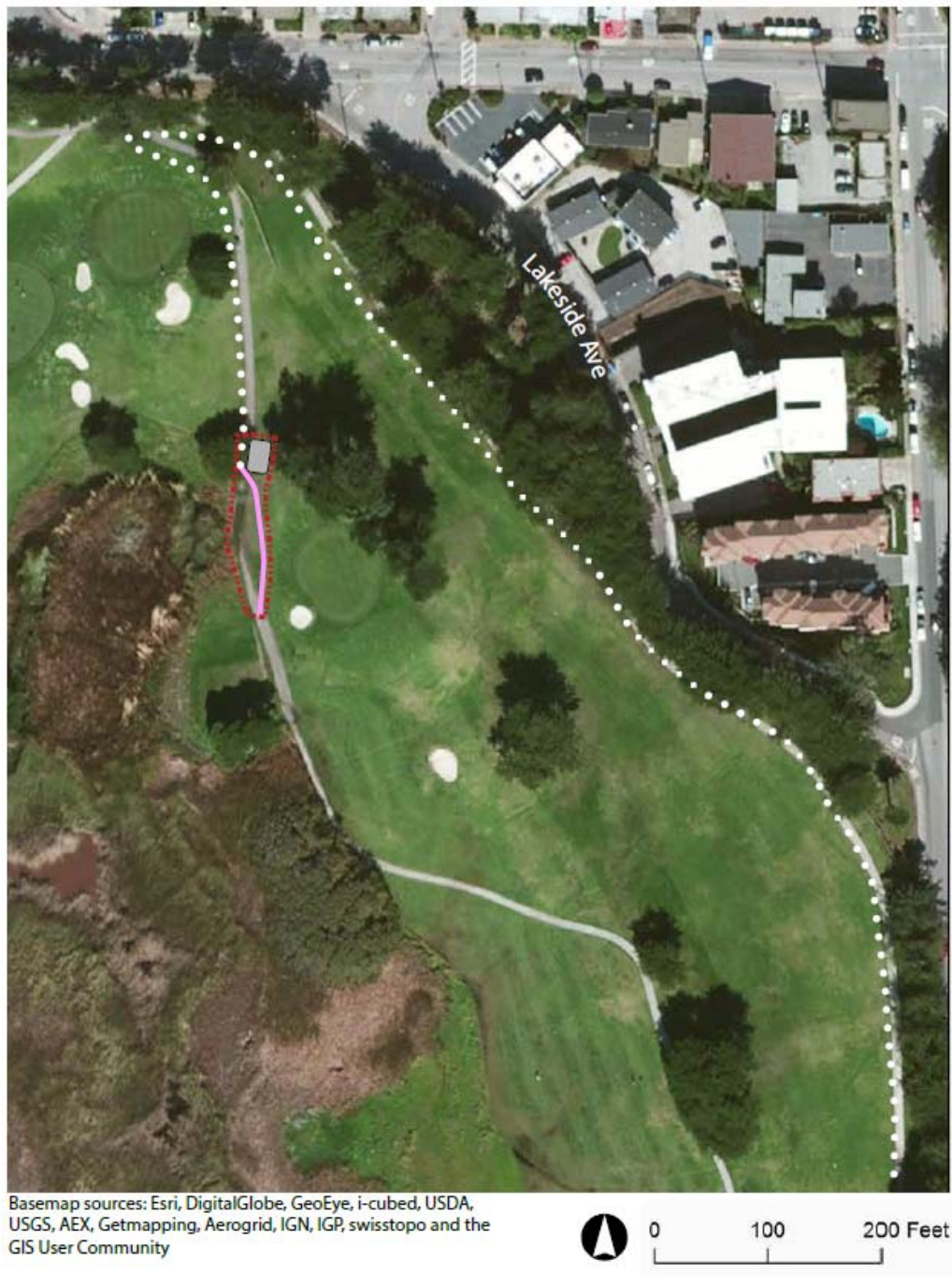


0 37.5 75 150 Feet

- ○ ○ Ingress/egress for heavy equipment
- Temporary project impact areas during construction
- Removal of sediment and emergent vegetation area
- Approximate location of heavy equipment staging during construction

Figure 5. Detail of Proposed Project near HSP

Source: San Francisco Recreation and Park Department



- ○ ○ Ingress/egress for heavy equipment
- Temporary project impact areas during construction
- Approximate location of heavy equipment staging during construction
- New cart path

Figure 6. Detail of Proposed Golf Cart Path Realignment
Source: San Francisco Recreation and Park Department

B. PROJECT SETTING

Sharp Park is a public park, approximately 417 acres in size, located in the City of Pacifica in San Mateo County, that is owned and operated by the SFRPD. It is bisected from north to south by the PCH, and the proposed project site is located to the west of PCH. Sharp Park is bounded by the Pacific Ocean to the west. To the north and south, portions of Sharp Park are bordered by residential development. To the south and east, Sharp Park abuts portions of the GGNRA. Sharp Park contains an 18-hole golf course, an archery range, a clubhouse, a remediated former rifle range, a parking lot, and extensive natural areas including an approximately 27-acre wetland complex consisting of HSP, LS, a channel and culverts that connect HSP to LS, and adjacent wetlands.

C. COMPATIBILITY WITH EXISTING ZONING AND PLANS

	<i>Applicable</i>	<i>Not Applicable</i>
Discuss any variances, special authorizations, or changes proposed to the Planning Code or Zoning Map, if applicable.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discuss any conflicts with any adopted plans and goals of the City or Region, if applicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Discuss any approvals and/or permits from City departments other than the Planning Department or the Department of Building Inspection, or from Regional, State, or Federal Agencies.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Plans and Policies

San Francisco Plans and Policies

San Francisco land use plans and policies are primarily applicable to projects within the jurisdictional boundaries of San Francisco, although in some cases they may apply to projects outside San Francisco. This information is relevant to the evaluation of impacts of the proposed project with respect to specific significance criteria under CEQA that require analysis of the compatibility of a proposed project with certain aspects of local land use plans and policies.

The SFRPD is guided by the San Francisco City Charter along with other applicable city codes, plans, and policies. These plans include the San Francisco General Plan, which sets forth the comprehensive, long-term land use policy for CCSF, and the San Francisco Sustainability Plan, which addresses the long-term sustainability of CCSF. The plans and policies applicable to the proposed project, as well as other relevant plans and policies, are discussed herein.

This section discusses the project's inconsistencies, if any, with applicable plans and policies that may result in physical environmental effects. If no inconsistencies are identified, the discussion lists the plans that were reviewed and states that no inconsistencies were identified.

Policy conflicts do not, in and of themselves, indicate a significant environmental effect within the meaning of CEQA, in that the intent of CEQA is to determine physical effects associated with a project. Many of the plans of CCSF and the other relevant jurisdictions contain policies that address multiple goals pertaining to different resource areas. To the extent that physical environmental impacts of a proposed project may result from conflicts with one of the goals related to a specific resource topic, such impacts are analyzed in this Initial Study in that respective topic section, such as Section E.7, Air Quality, and Section E.13, Biological Resources.

San Francisco General Plan

Although the General Plan was developed for lands within the jurisdictional boundaries of CCSF, its underlying goals apply to CCSF projects outside the boundaries of CCSF. The San Francisco General Plan provides general policies and objectives to guide land use decisions. The General Plan contains 10 elements (Commerce and Industry, Recreation and Open Space, Housing, Community Facilities, Urban Design, Environmental Protection, Transportation, Air Quality, Community Safety, and Arts) that set forth goals, policies, and objectives for the physical development of San Francisco. The compatibility of the proposed project with General Plan goals, policies, and objectives that do not relate to physical environmental issues will be considered by decision-makers as part of their decision whether to approve or disapprove the proposed project. No inconsistencies with the *San Francisco General Plan* were identified.

Proposition M – The Accountable Planning Initiative

In November 1986, the voters of San Francisco approved Proposition M, the Accountable Planning Initiative, which added Section 101.1 to the *Planning Code* to establish eight Priority Policies. These policies, and the subsection of Section E of this Initial Study addressing the environmental issues associated with the policies, are: (1) preservation and enhancement of neighborhood-serving retail uses; (2) protection of neighborhood character (Topic 1, Land Use and Land Use Planning, Question 1c); (3) preservation and enhancement of affordable housing (Topic 3, Population and Housing, Question 3b, with regard to housing supply and displacement issues); (4) discouragement of commuter automobiles (Topic 5, Transportation and Circulation, Questions 5a, 5b, and 5f); (5) protection of industrial and service land uses from commercial office development and enhancement of resident employment and business ownership (Topic 1, Land Use and Land Use Planning, Question 1c); (6) maximization of earthquake preparedness (Topic 14, Geology and Soils, Question 14a through 14d); (7) landmark and historic building preservation (Topic 4, Cultural Resources, Question 4a); and (8) protection of open space (Topic 9, Wind and Shadow, Questions 9a and 9b; and Topic 10, Recreation, Questions 10a and 10c).

Prior to issuing a permit for any project which requires an Initial Study under the CEQA, prior to issuing a permit for any demolition, conversion, or change of use, and prior to taking any action that requires a finding of consistency with the General Plan, the City is required to find that the proposed project or legislation would be consistent with the Priority Policies. As noted above, the consistency of the proposed project with the environmental topics associated with the Priority Policies is discussed in Section E, Evaluation of Environmental Effects, of this Initial Study, providing information for use in the approval for the proposed project.

No inconsistencies with the General Plan Priority Policies were identified.

1995/2006 Significant Natural Resource Areas Management Plans

On January 19, 1995, the San Francisco Recreation and Park Commission approved the first SNRAMP. 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. The SNRAMP was developed to preserve, restore, and enhance the remnant Natural Areas and to promote environmental stewardship of these areas.

Over the course of several years, the SFRPD updated and expanded the level of detail in the 1995 SNRAMP, ultimately resulting in a new SNRAMP, with a final draft plan published in February 2006. The San Francisco Recreation and Park Commission approved the final draft plan for CEQA evaluation in August 2006. The proposed 2006 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 proposed 2006 SNRAMP is currently undergoing environmental review. A draft

Environmental Impact Report (“Draft EIR”) was published on August 31, 2011, and the Planning Department is currently preparing responses to comments received on the Draft EIR.

Sustainability Plan for San Francisco

The Sustainability Plan for San Francisco was endorsed by the San Francisco Board of Supervisors in 1997. Although the Board has not committed CCSF to perform the actions addressed in the plan, the plan serves as a blueprint for sustainability, with many of its individual proposals requiring further development and public comment should they be proposed for implementation. The underlying goals of the plan are to maintain the physical resources and systems that support life in San Francisco and to create a social structure that will allow such maintenance. It is divided into 15 topic areas, 10 that address specific environmental issues (Air Quality; Biodiversity; Energy, Climate Change and Ozone Depletion; Food and Agriculture; Hazardous Materials; Human Health; Parks, Open Spaces and Streetscapes; Solid Waste; Transportation; and Water and Wastewater), and five that are broader in scope and cover many issues (Economy and Economic Development; Environmental Justice; Municipal Expenditures; Public Information and Education; and Risk Management). Each topic area in the plan has a set of indicators that are to be used over time to determine whether San Francisco is moving in a sustainable direction in that particular area. The Biodiversity section, which includes 39 specific actions, addresses the goals of increased ecological understanding, protection, and restoration of remnant natural ecosystems; increased habitat value in developed and naturalistic areas; and collection, organization, and development of historic information on habitat and biodiversity.

The Sustainability Plan for San Francisco was developed to address San Francisco’s long-term environmental sustainability, and it includes many of the goals and objectives of the 1995 SNRAMP. No inconsistencies with the Sustainability Plan for San Francisco were identified.

Regional Plans and Policies

San Francisco Bay Basin (Region 2) Water Quality Control Plan

The San Francisco Bay Basin (Region 2) Water Quality Control Plan contains water quality regulations adopted by the SFRWQCB. It has been approved by the California State Water Resources Control Board, the Office of Administrative Law, and the U.S. Environmental Protection Agency (USEPA).²⁶ It also contains statewide regulations adopted by the California Water Resources Control Board and other state agencies that refer to activities regulated by the board. No inconsistencies with the San Francisco Bay Basin (Region 2) Water Quality Control Plan were identified.

If the preferred method for sediment and emergent vegetation removal involves pumping water from HSP to lower the water level, the SFRPD would seek modification of the existing Section 401 and NPDES permits issued by the SFRWQCB, as required by the SFRWQCB. No inconsistencies with the San Francisco Bay Basin (Region 2) Water Quality Control Plan were identified.

²⁶ San Francisco Bay Regional Water Quality Control Board (SFRWQCB). *Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin*. Available online at: http://www.waterboards.ca.gov/rwqcb2/basin_planning.shtml. Accessed May 16, 2013.

Other Regional Plans and Policies

The five principal regional planning agencies and their policy documents that guide planning in the nine-county Bay Area are the Plan Bay Area,²⁷ the Bay Area Air Quality Management District's (BAAQMD's) 2010 Clean Air Plan, the Metropolitan Transportation Commission's (MTC's) Regional Transportation Plan – Transportation 2035, the SFBWRQCB's San Francisco Basin Plan, and the San Francisco Bay Conservation and Development Commission's (BCDC's) San Francisco Bay Plan. Due to the scope and nature of the proposed project, there would be no anticipated conflicts with regional plans.

California Coastal Act

The California Coastal Act (CCA) applies to development occurring in the coastal zone. The act limits development in wetlands and coastal waters to certain types of projects (restoration projects, for example, are included among the list of permitted projects) and stipulates criteria under which such projects may be permitted. Under the CCC's regulations, an area may be classified as a wetland ("CCA-only wetland") if it meets one or more of the three parameters required that define wetlands under Section 404 of the FCWA: hydric soils, hydrophytic vegetation, or wetland hydrology. A portion of Sharp Park near the LS wetland complex is in the Coastal Zone under the CCC jurisdiction.²⁸ The majority of the project activities would take place entirely within the CCC jurisdiction and require a coastal development permit from the CCC. The final location of the proposed pond would be determined in consultation with the CCC.

The CCA includes specific policies that address issues such as public access and recreation, lower cost visitor accommodations, terrestrial and marine habitat protection, visual resources, landform alteration, agricultural lands, commercial fisheries, industrial uses, water quality, offshore oil and gas development, transportation, development design, power plants, ports, and public works. The policies of the CCA are the statutory standards that apply to planning and regulatory decisions made by the CCC and by local governments pursuant to the CCA. The CCA's policies are implemented in part through local coastal programs, which include local government land use plans, zoning codes, and other implementing plans and ordinances.

No inconsistencies with the CCA were identified (see Section E.1, Land Use and Land Use Planning for more information).

City of Pacifica Plans and Policies

Although the SFRPD and the proposed project in Sharp Park are not subject to City of Pacifica land use ordinances, plans, and policies, the following discussion is presented for informational purposes.

City of Pacifica Local Coastal Land Use Plan

The City of Pacifica's Local Coastal Land Use Plan (LUP) serves as the land use plan for the City of Pacifica's coastal zone and was written in accordance with the policies of the CCA. The LUP was adopted in 1980, and is undergoing an update. The LUP includes 33 Coastal Act policies, most of which are applicable to particular General Plan elements. The policies cover such topics

²⁷ Scott Edmondson, San Francisco Planning Department. *Email to Kei Zushi, San Francisco Planning Department, ABAG projections 2009*, July 23, 2013. This email is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

²⁸ Darryl Rance, California Coastal Commission (CCC). *Memorandum sent to John R. Bock, Tetra Tech, Boundary Determination No. 08-2011, Sharp Park Restoration Plan, San Mateo County*, May 31, 2011. This memorandum is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

as access, facilities, recreation, habitat protection, scenic and visual qualities, and cultural resources. No inconsistencies with the LUP were identified.

The majority of the project activities would take place entirely within the CCC jurisdiction and require a coastal development permit from the CCC. The final location of the proposed pond would be determined in consultation with the CCC.

Neighborhood Notification

A "Notification of Project Receiving Environmental Review" was sent out on January 15, 2013, to the owners of properties within 300 feet of the Sharp Park boundaries and to occupants of properties adjacent to the project site, as well as to other interested parties. The Planning Department received several letters in response to the notice. Respondents requested to receive environmental review documents and/or expressed concerns regarding the proposed project, which included: (1) impacts to CRLF and SFGS; (2) impacts to other special-status species and wetland habitats; and 3) historic resource impacts. These issues are addressed in the appropriate topic areas in Section E, Evaluation of Environmental Effects.

D. SUMMARY OF ENVIRONMENTAL EFFECTS

The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental topic.

<input type="checkbox"/> Land Use	<input checked="" type="checkbox"/> Air Quality	<input type="checkbox"/> Geology and Soils
<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Wind and Shadow	<input checked="" type="checkbox"/> Hydrology and Water Quality
<input type="checkbox"/> Population and Housing	<input type="checkbox"/> Recreation	<input type="checkbox"/> Hazards/Hazardous Materials
<input checked="" type="checkbox"/> Cultural and Paleo. Resources	<input type="checkbox"/> Utilities and Service Systems	<input type="checkbox"/> Mineral/Energy Resources
<input type="checkbox"/> Transportation and Circulation	<input type="checkbox"/> Public Services	<input type="checkbox"/> Agricultural Resources
<input type="checkbox"/> Noise	<input checked="" type="checkbox"/> Biological Resources	<input checked="" type="checkbox"/> Mandatory Findings of Significance

This Initial Study examines the proposed project to identify potential effects on the environment. For each item on the Initial Study Checklist, the evaluation has considered the impacts of the proposed project both individually and cumulatively. All items on the Initial Study Checklist that have been checked "Less than Significant with Mitigation Incorporated," "Less than Significant Impact," "No Impact," or "Not Applicable" indicate that, upon evaluation, staff has determined that the proposed project could not have a significant adverse environmental effect relating to that issue. A discussion is included for those items checked "Less than Significant with Mitigation Incorporated" and "Less than Significant Impact" and for most items checked "No Impact" or "Not Applicable." For all of the items checked "No Impact" or "Not Applicable" without discussion, the conclusions regarding potential significant adverse environmental effects are based upon field observation, staff experience and expertise on similar projects, and/or standard reference material available within the Planning Department, such as the Department's Transportation Impact Analysis Guidelines for Environmental Review, or the California Natural Diversity Database (CNDDB) and maps, published by the CDFW. The environmental topics checked above have been determined to be "Less than Significant with Mitigation Incorporated."

E. EVALUATION OF ENVIRONMENTAL EFFECTS

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
1. LAND USE AND LAND USE PLANNING – Would the project:					
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial impact upon the existing character of the vicinity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact LU-1: The proposed project would not physically divide an established community. (No Impact)

Implementation of the proposed project would occur entirely within the boundaries of Sharp Park (see Figure 3), which is an existing recreation facility that includes a golf course and open space. There is no existing established community within Sharp Park. Although the proposed construction of a perennial pond would result in the conversion of a portion of Sharp Park to open water wetland habitat for CRLF and SFGS, (see Figure 5), the proposed project would not include construction of any features that would divide Sharp Park or any existing community. None of the proposed project activities would alter the overall existing land use of the project site or vicinity, and the project site would remain as a public park, with a golf course and open space, upon completion of construction activities. Therefore, the proposed project would have no impact with respect to the physical division of an established community.

Impact LU-2: The proposed project would be consistent with the applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. (Less than Significant)

Land use regulations applicable to the project include the CCSF General Plan and CCA. As discussed in Section C, Compatibility with Existing Zoning and Plans, the project would not conflict with the General Plan. In addition, the proposed project is not subject to the City of Pacifica or San Mateo County plans and policies.

In Section C, Compatibility with Existing Zoning and Plans, the CCA is discussed and the City of Pacifica Local Coastal LUP is addressed for informational purposes. The primary objective of the CCA is the protection of wetlands and other environmentally sensitive habitats, water quality, public access and recreation, low cost visitor facilities, and the scenic and visual qualities of coastal areas and the control of coastal erosion and other hazards.^{29,30}

²⁹ CCC. *Program Overview*. Available online at: <http://www.coastal.ca.gov/whoweare.html>. Accessed July 19, 2013.

The proposed project would not restrict access to or within Sharp Park and would not affect low cost visitor facilities. As discussed in Section E.2, Aesthetics, none of the project elements would result in a significant impact to the visual quality of the nearby coastal areas. The proposed project would involve improvements to an existing pumphouse and habitat for CRLF and SFGS. The project would be subject to various mitigation measures to protect wetlands and other environmentally sensitive habits and water quality and minimize soil erosion and other hazards that could result from the proposed project (see Sections E.13, Biological Resources, E.14, Geology and Soils, E.15, Hydrology and Water Quality, and E.16, Hazards and Hazardous Materials, for more information).

A portion of Sharp Park near the LS wetland complex is in the Coastal Zone under the CCC jurisdiction.³¹ The majority of the project activities would take place entirely within the CCC jurisdiction and require a coastal development permit from the CCC. The final location of the proposed pond would be determined in consultation with the CCC. Development within the coastal zone may not commence until a coastal development permit has been issued by the CCC. Through its review of the coastal development permit, the CCC would ensure that the project would be consistent with the applicable provisions of the CCA.

In light of the above, the proposed project would be consistent with the San Francisco General Plan and CCA on balance, and therefore this impact is less than significant.

Impact LU-3: The proposed project would not have a substantial impact upon the existing character of the vicinity. (Less than Significant)

Sharp Park is an existing park, which includes a golf course and open space, including wetland habitat areas. It is bisected from north to south by PCH. To the north and south, portions of Sharp Park are bordered by residential development. Sharp Park is bounded by the Pacific Ocean to the west. The Mori Point GGNRA property borders the southwestern edge, and the Sweeney Ridge GGNRA property borders Sharp Park on the southeastern and eastern edges. The project site is primarily surrounded by open space and wetland habitat areas.

The proposed project would entail improvements to existing facilities and habitat areas within Sharp Park. The proposed improvements to the existing pumphouse and golf cart path realignment would be minor in scope, and would not alter the overall character of Sharp Park or its vicinity. The proposed project includes removal of emergent vegetation (cattails and bulrush) in HSP and the connecting channel to enhance habitat and establish native vegetation. This work would result in a reduction in the amount of vegetation in HSP and the connecting channel and could be noticeable to park visitors, but would not have a substantial impact on the existing character of Sharp Park. The proposed construction of a perennial pond would result in the conversion of a portion of Sharp Park to open water wetland habitat for CRLF and SFGS. The pond and associated wetland features would be aesthetically compatible with the existing character of the area. Project activities would not include construction of any features that would substantially affect the existing character of Sharp Park and its vicinity and Sharp Park would continue to be used as a park.

³⁰ CCC. *Laws, Regulations, and Legislative Information*. Available online at: <http://www.coastal.ca.gov/ccatc.html>. Accessed July 19, 2013.

³¹ Darryl Rance, CCC. *Memorandum sent to John R. Bock, Tetra Tech, Boundary Determination No. 08-2011, Sharp Park Restoration Plan, San Mateo County*, May 31, 2011. This memorandum is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

In light of the above, the proposed project would not result in any changes to the project site that could have a substantial impact on the character of Sharp Park or its vicinity, and this impact is less than significant.

Impact C-LU: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, would not make a considerable contribution to any cumulative significant land use impacts. (Less than Significant)

As of September 2013, there are no known past or present projects in the project vicinity that would interact with the proposed project to result in cumulative significant land use impacts. The Draft EIR prepared for the proposed 2006 SNRAMP, a reasonably foreseeable future project in the proposed project's vicinity, concluded that the proposed 2006 SNRAMP would not result in any significant land use impacts. Thus, no cumulative impact to land use within the project site vicinity exists to which this project could potentially contribute.

Moreover, the proposed project would not divide any existing community, conflict with plans and policies established for protecting the environment, or affect the existing land use characteristics of Sharp Park or its surroundings. Therefore, the proposed project would not contribute to a cumulative impact on land use and land use planning, even if one existed.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
2. AESTHETICS—Would the project:					
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and other features of the built or natural environment which contribute to a scenic public setting?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area or which would substantially impact other people or properties?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A visual quality analysis is somewhat subjective and considers the proposed project in relation to the surrounding visual character, heights and building types of surrounding uses, the project's potential to obstruct public scenic views, and its potential to create light and glare. A proposed project would have a substantial effect on the visual landscape if it were to cause a substantial demonstrable adverse change to the aesthetic value of the project site or its surroundings.

The intensity of the impact depends, in part, on viewers and their sensitivity to changes to scenic resources at the project site and its surroundings. Residents, for example, are normally sensitive to changes in their surroundings, as are those recreating. However, roadway travelers might not be as sensitive because changes to the environment are only viewed for a short period of time.

Sharp Park is bordered by the Pacific Ocean to the west and bisected by PCH. LS, HSP, and most of the Sharp Park Golf Course are on the western side of PCH; an archery range, the remaining golf course holes, and extensive canyon are on the eastern side. Sanchez Creek originates in the Upper Canyon of Sharp Park and approximately bisects the park in an east-west direction. Sharp Park is surrounded by open spaces, including Mori Point and Sweeney Ridge. The vegetation of Sharp Park is dominated by non-native (eucalyptus) forest and a golf course, but also contains areas with wetlands and scrub vegetation. Views of the project site are limited to the seawall, golf course, and GGNRA properties.

The proposed project does not include outdoor or indoor lighting or other components that would create new sources of light or glare. In addition, nighttime construction lighting would not be required because construction would be conducted between 7:00 a.m. and 5:00 p.m. Therefore, the project would result in no impact with respect to light and glare, and Question 2d is not discussed further.

Impact AE-1: The proposed project would not have a substantial adverse effect on scenic views and vistas. (Less than Significant)

A project would have a significant effect on scenic vistas if it would substantially degrade important public view corridors or obstruct scenic views from public areas viewable by a substantial number of people. View corridors are defined by physical elements such as buildings and structures that direct lines of sight and control view directions available to the public. The project site is adjacent to a golf course and open space, and therefore, no particular view corridors exist at or near the project site. Scenic views and vistas in the project site vicinity are limited to the seawall, golf course, and GGNRA properties.

The proposed project includes construction of steps and a maintenance walkway and replacement of an existing retaining wall around the existing pumphouse at HSP. These proposed structures would be constructed at locations lower in elevation than the existing nearby trails or access roads. In addition, these changes to the pumphouse are insignificant in scale and character and would not obstruct or restrict existing scenic views. Therefore, the proposed improvements would generally be unnoticeable to park visitors following project completion. The realigned golf cart path would be constructed at grade level and would not obstruct or restrict any scenic vistas. The proposed construction of a perennial pond would result in the conversion of a portion of Sharp Park to open water wetland habitat for CRLF and SFGS. The pond would be aesthetically compatible with the existing character of the areas and would not result in degradation of scenic views of the areas.

In summary, none of the proposed structures or other project improvements would substantially change existing scenic views and vistas. In light of the above, the proposed project's impact with respect to scenic views and vistas is less than significant.

Impact AE-2: The proposed project would not substantially damage any scenic resources. (Less than Significant)

Scenic resources are the visible physical features on a landscape (e.g., land, water, vegetation, animals, structures, and other features.) Changes to specific scenic resources of concern, such as vegetation, are described below. An existing access road located on top of the seawall, through which the primary project access would be provided, is not a designated scenic roadway.

While the visual setting of the project area would be temporarily altered by the presence of construction equipment such as a backhoe, Aquamog, long-arm excavator, and trucks,

construction-related impacts would be short term and temporary and would not result in long-term adverse impacts to the scenic resources of the project area or Sharp Park as a whole.

Given the minor scope of the proposed project, scenic resources would not be substantially affected by the proposed project. The proposed changes to the pumphouse and golf cart path would be virtually unnoticeable to those recreating on publicly accessible areas including the seawall, Mori Point, and the golf course. Changes to HSP and the connecting channel resulting from the emergent vegetation (cattails and bulrush) removal would include diminished vegetation cover and may be noticeable to visitors. Over time, the progression of natural processes would reduce these impacts, and given the relatively minor scale of the vegetation removal work, this would not result in a significant impact to scenic resources. The proposed pond would blend in with the surrounding areas which are characterized by open space, shrubs, and wetland features.

In light of the above, the proposed project's impact to scenic resources is less than significant.

Impact AE-3: The proposed project would result in a change to the existing character of the project site, but this change would not degrade the visual character or quality of the site and its surroundings. (Less than Significant)

During the proposed project construction, equipment such as a backhoe, Aquamog, long-arm excavator, and trucks would be visible. The presence of construction equipment and construction activities would temporarily detract from the overall visual quality of the area. Less visible equipment would also be part of project construction and include, for example, workers weeding and constructing the proposed structures. Construction is anticipated to occur for approximately 60 days over 18 months in the appropriate construction window in accordance with the Biological Opinion. While the equipment and project activities would temporarily detract from the overall visual quality of the areas, the equipment and these types of activities are temporary and not considered completely out of place or new to Sharp Park because maintenance activities similar to those involved in the proposed project have been conducted on a regular basis. Therefore, there would be less-than-significant impacts on the visual character or quality of the area from the proposed construction.

The proposed project includes construction of steps and a maintenance walkway and replacement of an existing retaining wall around the pumphouse at HSP. These changes to the pumphouse would not constitute a substantial change in scale and character of the pumphouse. The proposed construction of a perennial pond would result in the conversion of a portion of Sharp Park to open water wetland habitat for CRLF and SFGS. The pond and associated wetland features would be aesthetically compatible with the existing character of the area and would not result in degradation of the visual character or quality of the areas.

In summary, although the project would result in small changes to the existing character of the project site, the project would not degrade the visual character or quality of the site and its surroundings. Therefore, this impact is less than significant.

Impact C-AE: The proposed project, in combination with past, present, and reasonably foreseeable future development in the site vicinity, would not make a considerable contribution to any cumulative significant aesthetics impacts. (Less than Significant)

The geographic context for the analysis of visual resources consists of Sharp Park and the immediate surroundings. As of September 2013, there are no known past or present projects in the project vicinity that would, in combination of the proposed project, result in cumulative significant aesthetics impacts. The Draft EIR prepared for the proposed 2006 SNRAMP, a

reasonably foreseeable future project in the proposed project's vicinity, concluded that the proposed 2006 SNRAMP would not result in a significant impact with respect to aesthetics. Thus, no cumulative aesthetics impact within the project vicinity exists to which this project could potentially contribute.

The proposed project would not substantially affect the visual character or quality of Sharp Park or its surroundings. The proposed project would not substantially damage any scenic resources. Therefore, the proposed project would not contribute to a cumulative impact on aesthetics.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
3. POPULATION AND HOUSING—					
Would the project:					
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing units or create demand for additional housing, necessitating the construction of replacement housing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project involves improvements to existing facilities and creation of habitat for CRLF and SFGS. It would not displace any residential uses, thus Question 3c is not applicable.

Impact PH-1: The proposed project would not induce population growth on the project site or in its vicinity, either directly or indirectly. (Less than Significant)

The proposed project would not entail construction of new residences or businesses, and therefore would not result in any direct impacts related to growth inducement. Workers for the proposed project include up to three to ten individuals, including SFRPD employees and contractors. The proposed project would not be likely to attract new employees to San Francisco because the project only involves minor construction work, which typically does not provide wages high enough to induce relocation. Even if all of these individuals were to move to the San Francisco Bay Area for this project, the increase in the population would be considered insignificant compared to the overall population of the San Francisco Bay Area. Therefore, the project would not induce substantial population growth or create significant demand for additional housing, and this impact is less than significant.

Impact PH-2: The proposed project would not displace existing housing units, or substantial numbers of people, or create demand for replacement housing. (No Impact)

The proposed project would not result in the displacement of any housing units or residents. Therefore, the proposed project would not create demand for replacement housing and no impact with respect to the displacement of housing units or people would result from the proposed project.

Impact C-PH: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, would not make a considerable contribution to any cumulative significant population and housing impacts. (Less than Significant)

As of September 2013, there are no known past or present projects in the project vicinity that would, in combination of the proposed project, result in cumulative significant population or housing impacts. The Initial Study prepared for the proposed 2006 SNRAMP concluded that the proposed 2006 SNRAMP would not result in any significant impacts with respect to population or housing. Thus, no cumulative impact to population or housing within the project vicinity exists to which this project could potentially contribute.

The proposed project would not induce any population growth, nor have significant physical environmental effects on population or housing demand. Therefore, the proposed project would not contribute to a cumulative impact on population and housing, even if one existed.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
4. CULTURAL AND PALEONTOLOGICAL RESOURCES—Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5, including those resources listed in Article 10 or Article 11 of the San Francisco Planning Code?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Historic Resources

As part of the analysis conducted to prepare the Draft EIR for the proposed 2006 SNRAMP, an historical resources evaluation (HRE) of the Sharp Park Golf Course and an Historic Resource Evaluation Response (HRER) for Sharp Park were completed.^{32,33} In addition, an HRER has been prepared by the Planning Department for the proposed project.³⁴ Sharp Park is not listed on the state or national registries. The property is considered a “Category A” (Known Historic Resource) property for the purposes of the Planning Department’s CEQA review based upon the previous reviews cited above.

Under CEQA, a property qualifies as a historic resource if it is “listed in, or determined to be eligible for listing in, the California Register of Historical Resources.” To be a historical resource for the purpose of CEQA, a property must not only be shown to be significant under the California Register of Historical Resources criteria, but it must also retain historic integrity.³⁵

The HRER prepared for this project found that Sharp Park appears eligible for listing on the California Register as a historic landscape for its significance under Criteria 1 (Events) and 3 (Architecture). The golf course’s development is associated with the broader events of the golden age of golf in the U.S. and California. The course is also an important example of a seaside golf course designed by a master landscape architect, Alister Mackenzie.

The HRER for the proposed project states that the character-defining features of the property include:

- The original features and design of the clubhouse;
- The original features and design of the permanent maintenance building; and
- The original features and design of the golf course, including the 12 original holes (current holes 1, 2, 3, 8, 9, 10, 11, 13, 14, 15, 17, and 18), the original landscape features, and the cypress tree plantings that line the fairways.

Archeological Resources

As part of the analysis conducted to prepare the Draft EIR for the proposed 2006 SNRAMP, records searches were completed 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).

³² Tetra Tech, Inc. *Historical Resources Evaluation Report for the Sharp Park Golf Course, Part of the Natural Areas, City and County of San Francisco, Pacifica, San Mateo County*, January 2011. This report is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

³³ Shelley Caltagirone, San Francisco Planning Department. *Historic Resource Evaluation Response (HRER), Significant Natural Resource Areas Management Plan: Sharp Park Golf Course, Pacifica*, February 15, 2011. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

³⁴ Shelley Caltagirone, San Francisco Planning Department. *Historic Resource Evaluation Response (HRER), Sharp Park Safety, Infrastructure Improvement, and Habitat Enhancement Project*, February 12, 2013. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

³⁵ “Integrity” is defined as “the authenticity of a property’s historic identity, evidenced by the survival of physical characteristics that existed during the property’s period of significance.” Historic integrity enables a property to illustrate significant aspects of its past.

Impact CP-1: The proposed project would not result in a substantial adverse change in the significance of historical architectural resources, including the Sharp Park historic landscape. (Less than Significant)

The HRER prepared for this project concluded that the proposed project would not result in any significant impacts to historic resources, and is summarized below. Furthermore, the work would comply with the Secretary of the Interior Standards for the Treatment of Historic Properties and the Guidelines for Rehabilitating Cultural Landscapes.

The proposed improvements to the HSP pumphouse would not significantly alter the overall form of the pumphouse structure or affect the historic setting or character of Sharp Park. The existing pumphouse is not considered to be an historic character-defining feature. In addition, the proposed changes would maintain the existing character and the setting of hole number 12, which is an altered but contributing feature of the historic landscape.

The proposed perennial pond would be located to the southeast of HSP, along the southern edge of Sharp Park. This periphery location would ensure the preservation of the Sharp Park setting. The proposed pond would be in keeping with the existing character of the wetland area in this location. While the proposed project would involve the removal of emergent vegetation in the wetland complex areas, it would not result in disturbance to any historically significant plantings (i.e., the cypress tree plantings that line the fairways).

The existing circulation pattern of the course would remain essentially unchanged, except that one segment of an existing golf cart path, which is not a character-defining feature of the site, would be slightly re-routed near the tee box for hole number 15. Hole number 15 is a contributing feature of the historic landscape. However, this change would not significantly alter the character of a historic fairway or hole as it would only shift the path 5 to 10 feet east of its current location, essentially maintaining the existing route. In addition, this change would not result in removal of any historically significant material.

In light of the above, the proposed project would not result in a significant impact to historical resources.

Impact CP-2: The proposed project would result in damage to, or destruction of, as-yet unknown archeological remains, should such remains exist beneath the project site. (Less than Significant with Mitigation)

When determining the potential for encountering archeological resources, relevant factors include the location, depth, and the extent of excavation proposed, as well as any recorded information on known resources in the area. An Environmental Planning Preliminary Archeological Review (PAR): Checklist has been prepared by the Planning Department's archeologist for the proposed project and is summarized below.

The PAR Checklist notes that there is no previous archeological documentation for the project site and that it is unknown to what extent grading or re-contouring has historically occurred within the project area or to what extent the current landscape is the result of human modifications as no geological or geotechnical studies were available for the review of this project.

The Sharp Park area is sensitive for prehistoric resources. A number of prehistoric shell midden sites (CA-SMA-162, CA-SMA-268, S-31602 and C-116) have been recorded/documented. CA-SMA-268 is a prehistoric shell midden settlement site that contained artifactual material, including obsidian projectile points, a groundstone pestle, chert debitage, and fire-cracked rock

along Calera Creek to the southeast of the project site. There is a limestone quarry site near the coastal shoreline southwest of HSP. The limestone quarry was quarried by Mission neophytes working at the Mission Dolores asistencia of San Pedro y San Pablo to the east for whitewash and plaster for adobe structures at the asistencia, Mission Dolores and the Presidio de San Francisco. Ethnohistorically, the Aramai village of Timigtac is thought to have been located at Mori Point. CA-SFR-162, a prehistoric shell midden deposit is located just to the southwest of HSP. CA-SFR-162 may be a redeposited shell midden deposit. Finally, to the west of the proposed project site is a recorded historical archeological feature associated with the Sharp Park Temporary Detention Station/Sharp Park State Relief Camp (1930s-1946).

Based on the above, the PAR Checklist concluded that the proposed project could have significant effects on archeological resources given the location of the project and the depth of excavation resulting from the project, which would be a maximum of five feet below ground surface (bgs), and that implementation of **Mitigation Measure M-CP-2** below would reduce the potential impacts to a less-than-significant level.

Mitigation Measure M-CP-2 - Accidental Discovery

The following mitigation measure is required to avoid any potential adverse effect from the proposed project on accidentally discovered buried or submerged historical resources as defined in *CEQA Guidelines* Section 15064.5(a)(c). The project sponsor shall distribute the Planning Department archeological resource "ALERT" sheet to the project prime contractor; or to any project subcontractor (including demolition, excavation, grading, etc. firms) involved in soils disturbing activities within the project site. Prior to any soils disturbing activities being undertaken each contractor is responsible for ensuring that the "ALERT" sheet is circulated to all field personnel including, machine operators, field crew, supervisory personnel, etc. The project sponsor shall provide the Environmental Review Officer (ERO) with a signed affidavit from the responsible parties (prime contractor and subcontractor(s)) to the ERO confirming that all field personnel have received copies of the Alert Sheet.

Should any indication of an archeological resource be encountered during any soils disturbing activity of the project, the project Head Foreman and/or project sponsor shall immediately notify the ERO and shall immediately suspend any soils disturbing activities in the vicinity of the discovery until the ERO has determined what additional measures should be undertaken.

If the ERO determines that an archeological resource may be present within the project site, the project sponsor shall retain the services of an archaeological consultant from the pool of qualified archaeological consultants maintained by the Planning Department archaeologist. The archeological consultant shall advise the ERO as to whether the discovery is an archeological resource, retains sufficient integrity, and is of potential scientific/historical/cultural significance. If an archeological resource is present, the archeological consultant shall identify and evaluate the archeological resource. The archeological consultant shall make a recommendation as to what action, if any, is warranted. Based on this information, the ERO may require, if warranted, specific additional measures to be implemented by the project sponsor.

Measures might include: preservation in situ of the archeological resource; an archaeological monitoring program; or an archeological testing program. If an archeological monitoring program or archeological testing program is required, it shall be consistent with the Environmental Planning (EP) division guidelines for such programs. The ERO may also require that the project sponsor immediately implement a site security program if the archeological resource is at risk from vandalism, looting, or other damaging actions.

The project archeological consultant shall submit a Final Archeological Resources Report (FARR) to the ERO that evaluates the historical significance of any discovered archeological resource and describes the archeological and historical research methods employed in the archeological monitoring/data recovery program(s) undertaken. Information that may put at risk any archeological resource shall be provided in a separate removable insert within the final report.

Copies of the Draft FARR shall be sent to the ERO for review and approval. Once approved by the ERO, copies of the FARR shall be distributed as follows: California Archaeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy and the ERO shall receive a copy of the transmittal of the FARR to the NWIC. The EP division of the Planning Department shall receive one bound copy, one unbound copy and one unlocked, searchable PDF copy on CD of the FARR along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest or interpretive value, the ERO may require a different final report content, format, and distribution than that presented above.

Impact CP-3: The proposed project would have the potential to destroy paleontological resources or other unique geological features, should such remains exist beneath the project site. (Less than Significant with Mitigation)

The proposed project would involve excavation of up to five feet bgs. It is possible that this depth may reach Pleistocene deposits that may contain paleontological resources or a unique geological formation; therefore, it is anticipated that excavation associated with the proposed project could encounter paleontological resources, potentially resulting in a significant impact. With the implementation of **Mitigation Measure M-CP-3**, as outlined below, the proposed project's impacts on paleontological resources would be less than significant.

Mitigation Measure M-CP-3 - Paleontological Training Program and Alert Sheet

To reduce the potential for the proposed project to result in a significant impact on paleontological resources, the SFRPD shall arrange for a paleontological training by a qualified paleontologist regarding the potential for such resources to exist in the project site and how to identify such resources. The training shall also include a review of penalties for looting and disturbance of these resources. An alert sheet shall be issued and shall include the following:

1. A discussion of the potential to encounter paleontological resources;
2. Instructions for reporting observed looting of a paleontological resource; and instruct that if a paleontological deposit is encountered within a project area, all soil-disturbing activities in the vicinity of the deposit shall cease and the ERO shall be notified immediately.
3. If an unanticipated paleontological resource is encountered during project activities, all project activities shall stop, and a professional paleontologist shall be hired to assess the potential paleontological resource and its significance. The findings shall be presented to the ERO, who shall determine the additional steps to be taken before work in the vicinity of the deposit is authorized to continue.

Impact CP-4: The proposed project could substantially disturb human remains, should such remains exist beneath the project site. (Less than Significant with Mitigation)

There is a possibility that intact burials exist within the project area footprint. Therefore, the proposed project has the potential to result in significant impacts to human remains. With the implementation of **Mitigation Measure M-CP-4** as outlined below, the proposed project's impacts to human remains would be less than significant.

Mitigation Measure M-CP-4 - Human Remains, Associated or Unassociated Funerary Objects

The treatment of human remains and of associated or unassociated funerary objects discovered during any ground-disturbing activity shall comply with applicable State and Federal Laws, including immediate notification to the San Mateo County Coroner and in the event of the Coroner's determination that the human remains are Native American remains, notification to the Native American Heritage Commission (NAHC) who shall appoint a Most Likely Descendant (MLD) (Pub. Res. Code Sec. 5097.98). The project archaeological consultant, SFRPD, and MLD shall make all reasonable efforts to develop an agreement for the treatment of, with appropriate dignity, human remains and associated or unassociated funerary objects (CEQA Guidelines. Sec. 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, curation, possession, and final disposition of the human remains and associated or unassociated funerary objects.

Impact C-CP: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, would not make a considerable contribution to any cumulative significant impacts to cultural or paleontological resources. (Less than Significant with Mitigation)

Historic Resources

Potential cumulative impacts to historic resources caused by the proposed project and the proposed 2006 SNRAMP were evaluated in the HRER³⁶ prepared for this project. At the time of writing, the Final EIR for the proposed 2006 SNRAMP has not been prepared. However, the Draft EIR for the proposed 2006 SNRAMP identified several significant historical resource impacts to the golf course at Sharp Park, which include the following:

- The closure of hole number 12 would cause a significant impact to the historic resource as the work would eliminate an original hole and fairway on the west side of the course. Its removal would significantly alter the original golf course design and boundaries.
- Modifying approximately 13 acres of the golf course to create upland habitat along the east side of the lagoon would require slightly shortening or narrowing hole numbers 10 and 13. This alteration would significantly alter the character of these original fairways. Therefore, the work would cause a significant impact to the historic resource.
- The recreation analysis of the Draft EIR prepared for the proposed 2006 SNRAMP proposes a mitigation measure (Option 1) that would create a new hole on the east side

³⁶ Shelley Caltagirone, San Francisco Planning Department. *Historic Resource Evaluation Response (HRER), Sharp Park Safety, Infrastructure Improvement, and Habitat Enhancement Project*, February 12, 2013. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

of PCH as a replacement for hole number 12. This would result in a total of 13 holes on the west side of the highway and five holes on the east side. This arrangement would not maintain the historic balance of holes on either side of the highway and would change the historic boundaries of the course. This would cause a significant impact to the original design of the historic resource.

- The recreation analysis of the Draft EIR prepared for the proposed 2006 SNRAMP proposes a mitigation measure (Option 2) that would create a new hole on the west side of PCH as a replacement for hole number 12. While the mitigation measure would change the layout of the holes, this alternative mitigation measure would restore some of the elements that Alister Mackenzie had implemented in his original design by placing the new holes in areas of the course where holes were historically placed. The proposed holes would also be in keeping with the historic boundaries of the golf course. Because of the restorative aspect of the work, this mitigation would cause a less-than-significant impact to the resource.

In summary, the proposed 2006 SNRAMP project would result in significant impacts to several character-defining features of the golf course, including hole numbers 10, 12, and 13. Because the proposed project would not cause any substantial adverse changes to the historic resource, the project would not contribute considerably to any cumulative impacts to historic resources in combination with the proposed 2006 SNRAMP project.

Archeological and Other Cultural Resources

The Draft EIR for the proposed 2006 SNRAMP concluded that with the implementation of mitigation measures the proposed 2006 SNRAMP would not result in any significant impacts to archeological and paleontological resources and human remains that could be present within Sharp Park.

As discussed above, the proposed project would have the potential to result in significant impacts, however, **Mitigation Measures M-CP-2, M-CP-3, and M-CP-4** would reduce the project's potential impact to archaeological resources, paleontological resources, and human remains to a less-than-significant level. Therefore, the proposed project would not contribute considerably to a cumulative impact associated with archeological resources, paleontological resources, or human remains.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
5. TRANSPORTATION AND CIRCULATION—					
Would the project:					
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways (unless it is practical to achieve the standard through increased use of alternative transportation modes)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels, obstructions to flight, or a change in location, that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Result in inadequate parking capacity that could not be accommodated by alternative solutions?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., conflict with policies promoting bus turnouts, bicycle racks, etc.), or cause a substantial increase in transit demand which cannot be accommodated by existing or proposed transit capacity or alternative travel modes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sharp Park is bisected from north to south by PCH (see Figure 1). Public streets located near the project site include: Francisco Boulevard; Bradford Way; Fairway Drive; an existing access road located on top of the seawall; Clarendon Road; Lakeside Avenue; and Laguna Way. The main project access would be provided via the existing access road located on top of the seawall.

The project site is not located near a public or private airport or within an airport land use plan area. Therefore, Question 5c would not apply to the proposed project.

Impact TR-1: The proposed project would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, nor would the proposed project conflict with an applicable congestion management program, nor would it exceed any applicable level of service standards and travel demand measures. (Less than Significant)

The proposed project would not include any activities that would conflict with any applicable transportation or congestion management plan, ordinance, or policy. While vehicles would be used during project construction, the frequency of trips by these vehicles would be minimal. Workers for the proposed project would include approximately three to ten individuals, including SFRPD employees or contractors. The increase in the traffic volume resulting from the proposed project, which would be implemented over 18 months, would be negligible compared to the overall traffic volume in the project site vicinity or the San Francisco Bay Area. With the exception of the realigned golf cart path, the majority of the proposed improvements would be

conducted in publicly inaccessible areas. Therefore, it is not anticipated that the proposed improvements would attract substantially more visitors. As such, the project would not be expected to generate a substantial number of additional visitors to the project site.

The proposed project would not be expected to generate substantially more traffic over existing levels following project construction. As a result, the proposed project would not increase traffic such that the project would result in exceedance of any level of service standard, and therefore this impact is less than significant.

Impact TR-2: The proposed project would not increase hazards as a result of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses. (No Impact)

The proposed project does not include any design features that would substantially increase traffic hazards (e.g., creating a new sharp curve or dangerous intersections), and would not include any incompatible uses, as discussed above in Section E.1, Land Use and Land Use Planning. The proposed project does not include any changes to existing roadways, and involves minor realignment of an existing golf cart path. The realigned path would be substantially similar to the existing path in terms of width, shape, and material. Therefore, there would be no impacts associated with increased traffic hazards resulting from the proposed project.

Impact TR-3: The proposed project would not result in inadequate emergency access. (No Impact)

The proposed project would be implemented within the existing boundaries of Sharp Park, and would not result in any changes in access to adjacent facilities or residences or to Sharp Park itself. Therefore, no impact on emergency access would result from the proposed project.

Impact TR-4: The proposed project would not result in inadequate parking capacity that could not be accommodated by alternative solutions (Less than Significant)

The proposed project would not involve establishment of new land uses or a change in land use that would require additional parking spaces. As mentioned in Impact TR-1, it is not anticipated that the proposed improvements would attract substantially more visitors. As such, the project would not be expected to generate substantial parking demand and this impact is less than significant.

Impact TR-5: The proposed project would not conflict with adopted policies, plans or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such features. (Less than Significant)

The proposed project would be implemented within the existing boundaries of Sharp Park, and would not conflict with any adopted policies, plans or programs regarding public transit. Furthermore, the proposed project would not impact any bicycle or pedestrian facilities (see Figure 3). During the construction period, several equipment storage and staging areas would be established in the project area. None of these storage and staging areas would significantly affect movements of park users on the project site or the seawall. As part of the proposed project, one segment of an existing golf cart path, totaling approximately 100 feet in length, would be relocated to shift the path approximately 5 to 10 feet further away from habitat areas (see Figure 6). The golf cart path segment becomes inundated during seasonal flooding and covered with mud or grass. The proposed realignment would enhance the safety and usability of the path and this impact is less than significant. Another nearby segment of the golf cart path (to the south of the path segment proposed for realignment) floods seasonally as well. It was determined that this

south segment would not be realigned as part of this project and golf carts would be manually routed around the flooded area as needed.

Impact C-TR: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, would not make a considerable contribution to any cumulative significant transportation impacts. (Less than Significant)

As of September 2013, there are no known past or present projects in the project vicinity that would, in combination of the proposed project, result in cumulative transportation impacts during the construction period of the proposed project. The Initial Study prepared for the proposed 2006 SNRAMP, a reasonably foreseeable future project in the proposed project's vicinity, concluded that the proposed 2006 SNRAMP would not result in any significant transportation impacts to which this project could potentially contribute.

The proposed project would not result in any significant project-specific impacts to transportation and circulation. The number of trips generated as a result of the proposed project would be minimal. The project would not result in any significant impacts on transit, bicycle, and pedestrian facilities. Therefore, the proposed project would not contribute to a cumulative transportation impact.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
6. NOISE—Would the project:					
a) Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Be substantially affected by existing noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The project site is not within an airport land use plan area, nor is it in the vicinity of a private airstrip. Therefore, Questions 6e and 6f are not applicable.

Impact NO-1: The proposed project would not result in a substantial permanent increase in ambient noise levels in the project vicinity, nor would it expose persons to noise levels and vibration in excess of standards established in the local general plan or noise ordinance. (Less than Significant)

There are no known or established noise standards applicable to the proposed project. With respect to project-generated traffic, generally, traffic must double in volume to produce a noticeable increase in average noise levels. Project-generated traffic during construction would not result in an audible change given the small scale of this project, which would involve a total of three to ten SFRPD employees and contractors. The proposed project involves improvements to existing facilities (primarily the existing pumphouse) and habitat. Once construction is complete, noise resulting from the project would be the same as under existing, or baseline, conditions. Further, the proposed project would not add any new source of permanent groundborne vibration or noise. As a result, the proposed project would not substantially increase ambient noise levels³⁷ or expose persons to substantial noise levels and vibration. Therefore, this impact is less than significant.

Impact NO-2: The proposed project would not result in a substantial temporary or periodic increase in ambient noise levels and vibration in the project vicinity. (Less than Significant)

During project implementation, construction equipment operation (a backhoe, Aquamog, long-arm excavator, and trucks) would temporarily increase noise levels and vibration in the project area and its vicinity, and could be considered an annoyance by occupants of nearby properties or visitors to Sharp Park. Construction noise and vibration levels would fluctuate depending on the construction phase, equipment type and duration of use, distance between noise source and receptor, and presence or absence of barriers. During construction, which is anticipated to occur for approximately 60 days over 18 months in the appropriate construction window in accordance with the Biological Opinion, there would be truck traffic to and from the site, delivering building materials and transporting material and debris removed from the project site. Potential noise impacts are expected to be discontinuous and of very short duration during the day time. Given the relatively minor scope of the proposed project, temporary and intermittent use of construction equipment would not be considered to result in substantial noise or vibration. As a result, the proposed project's impacts associated with noise and vibration would be less than significant.

³⁷Ambient noise—the background noise in an area or environment, being a composite of sounds from many sources near and far.

Impact C-NO: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, would not make a considerable contribution to any cumulative significant noise impacts. (Less than Significant)

As of September 2013, there are no known past or present projects in the project vicinity that would, in combination of the proposed project, result in cumulative construction noise impacts during the construction period of the proposed project. The Initial Study prepared for the proposed 2006 SNRAMP, a reasonably foreseeable future project in the proposed project's vicinity, concluded that the proposed 2006 SNRAMP would not result in any significant impacts with respect to noise. Furthermore, the proposed project's construction activities would not overlap with those identified in the proposed 2006 SNRAMP. Thus, no construction noise cumulative impact within the project vicinity exists to which this project could potentially contribute.

Even if a cumulative impact due to traffic noise were to result from future foreseeable residential and non-residential development in the vicinity, because the proposed project would not substantially increase traffic volumes, the project would not contribute considerably to any cumulative traffic-related increases in ambient noise. Therefore, the project's cumulative noise impacts are considered less than significant.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
7. AIR QUALITY					
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal, state, or regional ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting

Sharp Park is located within the San Francisco Bay Area Air Basin (SFBAAB). The BAAQMD is the regional agency with jurisdiction over the nine-county SFBAAB, which includes San Francisco, Alameda, Contra Costa, Marin, San Mateo, Santa Clara, and Napa Counties and portions of Sonoma and Solano Counties. The BAAQMD is responsible for attaining and maintaining air quality in the SFBAAB within federal and state air quality standards, as established by the federal Clean Air Act (CAA) and the California Clean Air Act (CCAA), respectively. Specifically, the BAAQMD has the responsibility to monitor ambient air pollutant levels throughout the SFBAAB and to develop and implement strategies to attain the applicable federal and state standards. The CAA and the CCAA require plans to be developed for areas that do not meet air quality standards. The most recent air quality plan, the *2010 Clean Air Plan (CAP)*, was adopted by the BAAQMD on September 15, 2010. The *2010 CAP* updates the *Bay Area 2005 Ozone Strategy* in accordance with the requirements of the CCAA to implement all feasible measures to reduce ozone; provide a control strategy to reduce ozone, particulate matter, air toxics, and greenhouse gases in a single, integrated plan; and establishes emission control measures to be adopted or implemented. The *2010 CAP* contains the following primary goals:

- Attain air quality standards;
- Reduce population exposure and protect public health in the San Francisco Bay Area; and
- Reduce greenhouse gas emissions and protect the climate.

The proposed project consists of the following construction elements:

- Construction of steps (approximately 3 feet in width and 14.3 feet in length) from the access road to the existing HSP pumphouse;
- Construction of a maintenance walkway (approximately 4.6 feet in width);
- Replacement of a wooden retaining wall with a concrete retaining wall;
- Removal of sediment and emergent vegetation within HSP and the connecting channel that links HSP with LS;
- Construction of a perennial pond approximately 1,600 sf; and
- Realignment of a segment of the existing golf cart path.

Construction activities are required to be undertaken between June 1 and October 31 in accordance with the USFWS-issued Biological Opinion. Construction is anticipated to occur for approximately 60 days over 18 months in the appropriate construction window in accordance with the Biological Opinion. Upon completion of construction activities, short-term air pollutant emissions would cease. Ongoing maintenance activities that may result in emissions of air pollutants, including those from vehicle trips, would be substantially similar to existing levels and therefore operational air pollutant emissions would not measurably increase upon completion of the proposed project. Therefore, the following analysis focuses on construction-related air quality impacts that would result from implementation of the proposed project.

Impact AQ-1: The proposed project would not conflict with or obstruct implementation of the applicable air quality plan. (Less than Significant)

Air quality plans developed to meet federal requirements are referred to as State Implementation Plans. The CAA and CCAA require plans to be developed for areas designated as nonattainment (with the exception of areas designated as nonattainment for the state PM₁₀ standard). As discussed above, on September 15, 2010, the BAAQMD, in cooperation with the Metropolitan Transportation Commission and the Association of Bay Area Governments (ABAG), adopted the

2010 Clean Air Plan (CAP).³⁸ The 2010 CAP represents the most current applicable air quality plan for the SFBAAB. Consistency with this plan is the basis for determining whether the proposed project would conflict with or obstruct implementation of an applicable air quality plan.

The 2010 CAP includes stationary-source control measures to be implemented through BAAQMD regulations; mobile-source control measures to be implemented through incentive programs and other activities; and transportation control measures to be implemented through transportation programs in cooperation with the Metropolitan Transportation Commission, local governments, transit agencies, and others. The 2010 CAP represents the Bay Area's most recent triennial assessment of the region's strategy to attain the state one-hour ozone standard.

In determining whether the proposed project would conflict with the 2010 CAP, the following analysis considers the degree to which the proposed project: (1) supports the primary goals of the 2010 CAP; (2) is consistent with the 55 control measures listed in the 2010 CAP; and (3) whether the project would hinder implementation of the 2010 CAP.

The proposed project would not introduce a new land use that would induce traffic trips in numbers that would constitute a significant impact on the local roadway network, local transit lines, or local bicycle and pedestrian networks. During the project's approximately 60-day (over 18 months in accordance with the Biological Opinion) construction period, temporary and intermittent traffic impacts would result from truck movements to and from the project site. However, construction would be a temporary activity and would not result in long-term air pollutant emissions. Given the nature and relatively minor scope of the proposed project, the proposed project would be consistent with the 2010 CAP, would not conflict with the primary goals of the plan, and would not disrupt, delay, or otherwise hinder implementation of the plan. Thus, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan and this impact would be less than significant.

Impact AQ-2: The proposed project would result in significant fugitive dust emissions during construction. (Less than Significant with Mitigation)

Project-related excavation, grading, and other construction activities may cause wind-blown dust that could contribute particulate matter into the local atmosphere. These emissions are termed "fugitive dust." Although there are federal standards for air pollutants and implementation of state and regional air quality control plans, air pollutants continue to have impacts on human health throughout the country. Dust can be an irritant causing watering eyes or irritation to the lungs, nose, and throat. Depending on exposure, adverse health effects can occur due to this particulate matter in general and also due to specific contaminants such as lead or asbestos that may be constituents of soil. The current health burden of particulate matter demands that, where possible, public agencies take feasible available actions to reduce sources of particulate matter exposure.

Fugitive dust emissions are typically generated during construction phases. Studies have shown that the application of BMPs at construction sites significantly control fugitive dust.³⁹ Individual measures have been shown to reduce fugitive dust by anywhere from 30 to 90 percent.⁴⁰ The BAAQMD recommends that construction projects within the SFBAAB employ a set of BMPs to

³⁸ Bay Area Air Quality Management District (BAAQMD). 2010 Clean Air Plan. Available online at: <http://www.baaqmd.gov/Divisions/Planning-and-Research/Plans/Clean-Air-Plans.aspx>. Accessed December 26, 2012.

³⁹ Western Regional Air Partnership. 2006. WRAP Fugitive Dust Handbook. September 7, 2006. This document is available online at http://www.wrapair.org/forums/dejff/dh/content/FDHandbook_Rev_06.pdf. Accessed February 16, 2012.

⁴⁰ BAAQMD, Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance, October 2009, page 27.

control fugitive dust emissions during construction and considers these projects to result in less-than-significant fugitive dust impacts.⁴¹

Construction associated with improvements to the pumphouse and wetland complex could generate fugitive dust during soil-disturbing activities including soil/vegetation removal, excavation, site grading, installation of proposed structures and realignment of the golf cart path. Although the proposed project would involve mostly wet soils and earthen access routes, unmitigated, fugitive dust generated by the proposed project could result in significant air quality impacts. Under such conditions, watering active construction areas would address most impacts from fugitive dust. **Mitigation Measure M-AQ-2**, below, requires the SFRPD to incorporate the following measures to reduce constructed-related fugitive dust emissions.

Mitigation Measure M-AQ-2 - Preparation and Implementation of a Dust Control Plan

The SFRPD shall comply with the following requirements to control fugitive dust:

- The SFRPD shall designate an individual to monitor compliance with dust control requirements identified in this mitigation measure;
- Water all active construction areas sufficiently to prevent dust from becoming airborne (without creating runoff) in any area of land clearing, earth movement, excavation, and other dust-generating activity. Watering shall occur as needed, and whenever wind speeds exceed 15 miles per hour. Reclaimed water shall be used whenever possible;
- Establish shutdown conditions based on wind, soil migration, and other factors;
- Limit the area subject to construction activities at any one time;
- During excavation and dirt-moving activities, wet sweep or vacuum the routes and paths where work is in progress at the end of the workday;
- Cover any inactive (no disturbance for more than seven days) stockpiles greater than ten cubic yards or 500 square feet of excavated materials, backfill material, import material, gravel, sand, road base, and soil with a 10 mil (0.01 inch), wildlife-friendly polyethylene plastic or equivalent tarp and brace it down or use other equivalent soil stabilization techniques;
- Limit the amount of soil in hauling trucks to the size of the truck bed, and secure the load with a tarpaulin;
- Enforce a 10-mile per hour (mph) speed limit for vehicles entering and exiting construction areas;
- All soil stockpiles, if any, shall be protected against wind and rainfall erosion at all times. Wildlife-friendly plastic sheeting or other similar material shall be used to cover soils and shall be securely anchored by sandbags or other suitable means. At no time shall any stockpiled materials be allowed to erode into any water body or drainage facility or onto any roadway; and
- Install and use wheel washers to clean truck tires.

The SFRPD shall prepare and submit a site-specific Dust Control Plan to the ERO for records. The Plan shall detail a protocol for project compliance with the above requirements.

Implementation of **Mitigation Measure M-AQ-2**, above, includes the BAAQMD-recommended BMPs and additional dust control measures and would reduce construction-related fugitive dust emissions to a less-than-significant level.

⁴¹ BAAQMD, *CEQA Air Quality Guidelines*, May 2011.

Impact AQ-3: The proposed project would emit criteria air pollutants during construction, but not at levels that would violate an air quality standard, contribute to an existing or projected air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants. (Less than Significant)

In accordance with the state and federal CAAs, air pollutant standards are identified for the following six criteria air pollutants: ozone, carbon monoxide (CO), particulate matter (PM), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead. These air pollutants are termed criteria air pollutants because they are regulated by developing specific public health- and welfare-based criteria as the basis for setting permissible levels. In general, the SFBAAB experiences low concentrations of most pollutants when compared to federal or state standards. The SFBAAB is designated as either in attainment⁴² or unclassified for most criteria pollutants with the exception of ozone, PM_{2.5}, and PM₁₀,⁴³ for which these pollutants are designated as non-attainment under the state or federal standards. By its very nature, regional air pollution is largely a cumulative impact in that no single project is sufficient in size to, by itself, result in non-attainment of regional air quality standards. Instead, a project's individual emissions contribute to existing cumulative air quality impacts. If a project's contribution to cumulative air quality impacts is considerable, then the project's impact on air quality would be considered significant.⁴⁴

As discussed above, the proposed project would contribute to regional criteria air pollutants during construction, but would not result in a measurable increase in emissions thereafter. Table 1, below, identifies air quality significance thresholds that are the basis for determining significant air quality impacts for the proposed project, followed by a discussion of each threshold. The thresholds identified in Table 1 are based on the BAAQMD's *Revised Draft Options and Justification Report, California Environmental Quality Act Air Quality Significance Thresholds*.⁴⁵ Projects that would result in criteria air pollutant emissions below these significance thresholds would not violate an air quality standard, contribute substantially to an air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants within the SFBAAB.

Table 1. Criteria Air Pollutant Significance Thresholds

Pollutant	Construction Thresholds
	Average Daily Emissions (lbs./day)
ROG	54
NO _x	54
PM ₁₀	82 (exhaust)
PM _{2.5}	54 (exhaust)
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices

⁴² "Attainment" status refers to those regions that are meeting federal and/or state standards for a specified criteria pollutant. "Non-attainment" refers to regions that do not meet federal and/or state standards for a specified criteria pollutant. "Unclassified" refers to regions where there is not enough data to determine the region's attainment status.

⁴³ PM₁₀ is often termed "coarse" particulate matter and is made of particulates that are 10 microns in diameter or larger. PM_{2.5}, termed "fine" particulate matter, is composed of particles that are 2.5 microns or less in diameter.

⁴⁴ BAAQMD, *California Environmental Quality Act Air Quality Guidelines*, May 2011, page 2-1.

⁴⁵ BAAQMD, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009.

Ozone Precursors. As discussed above, the SFBAAB is currently designated as non-attainment for ozone and particulate matter (PM₁₀ and PM_{2.5}). Ozone is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and oxides of nitrogen (NO_x). The potential for a project to result in a cumulatively considerable net increase in criteria air pollutants, which may contribute to an existing or projected air quality violation, are based on the state and federal Clean Air Acts emissions limits for stationary sources. The federal New Source Review (NSR) program was created by the federal CAA to ensure that sources of air pollution are constructed in a manner that is consistent with attainment of federal health based ambient air quality standards. Similarly, to ensure that new stationary sources do not cause or contribute to a violation of an air quality standard, BAAQMD Regulation 2, Rule 2 requires that any new source that emits criteria air pollutants above a specified emissions limit must offset those emissions. For ozone precursors ROG and NO_x, the offset emissions level is an annual average of 10 tons per year (or 54 pounds (lbs.) per day).⁴⁶ These levels represent emissions by which sources of air pollution are not anticipated to contribute to an air quality violation or result in a considerable net increase in criteria air pollutants.

Particulate Matter (PM₁₀ and PM_{2.5}). For PM₁₀ and PM_{2.5}, the emissions limit under the federal NSR is 15 tons per year. These emissions limits represent levels at which a source is not expected to have an impact on air quality.⁴⁷ Similar to ozone precursor thresholds identified above, these thresholds can be applied to the proposed project to evaluate the impact of the project's construction emissions on regional air quality.

Impact Analysis

Construction activities would emit criteria air pollutants from the combustion of fuel used by construction equipment, construction worker vehicles, and trucks delivering and removing materials to and from the site.

An evaluation of potential air quality impacts resulting from project construction activities was prepared using the California Emissions Estimator Model™ (CalEEMod), version CalEEMod.2011.1.⁴⁸ CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for quantifying criteria air pollutant emissions from the construction and operation of land use projects. CalEEMod contains the California Air Resources Board (ARB) Mobile Vehicle Emission Inventory Program 2007 and data specific to the SFBAAB. Construction equipment assumptions were provided by the SFRPD. Where specific information was unknown, default equipment, horsepower and operating hours were used, providing a conservative (i.e., worst case) estimate of criteria air pollutants. Results of the criteria air pollutant analysis are shown below in Table 2. These results reflect criteria air pollutant emissions that would result from both the improvements at the pumphouse and within the wetland complex.⁴⁹

⁴⁶ BAAQMD, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, page 17.

⁴⁷ *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, page 16.

⁴⁸ California Emissions Estimator Model (CalEEMod). Available online at: <http://www.caleemod.com/>. Accessed February 26, 2013.

⁴⁹ Detailed modeling assumptions and CalEEMod output sheets are available for public review as part of Case File No. 2012.1427E, at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA 94103.

Table 2. Project Construction Emission and Air Quality Significant Thresholds

Air Pollutant	Construction Emissions (lbs./day)	
	Project Emissions	Significance Threshold
Reactive organic gases (ROG)	1.9	54
Nitrogen oxides (NO _x)	11.5	54
Coarse particulate matter (PM ₁₀)	1.2 (exhaust only)	82 (exhaust only)
Fine particulate matter (PM _{2.5})	0.8 (exhaust only)	54 (exhaust only)

As shown in Table 2, the proposed project would result in construction emissions that are well below the applicable air quality significance thresholds. Therefore, the proposed project would not violate an air quality standard, contribute to an existing or projected air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants. Criteria air pollutant impacts would be less than significant.

Impact AQ-4: The proposed project would not expose sensitive receptors to substantial pollutant concentrations. (Less than Significant)

In addition to criteria air pollutants, individual projects may emit toxic air contaminants (TACs). TACs collectively refer to a diverse group of air pollutants that are capable of causing chronic (i.e., of long-duration) and acute (i.e., severe but of short-term) adverse effects to human health, including carcinogenic effects. Human health effects of TACs include birth defects, neurological damage, cancer, and death. There are hundreds of different types of TACs with varying degrees of toxicity. The ARB identified diesel particulate matter (DPM) as a TAC in 1998, primarily based on evidence demonstrating cancer effects in humans.⁵⁰ Mobile sources such as trucks and buses are among the primary sources of diesel emissions, and concentrations of DPM are higher near heavily traveled roadways. The estimated cancer risk from exposure to diesel exhaust is much higher than the risk associated with any other TAC routinely measured in the region. Heavy-duty vehicles and equipment used during construction activities would result in emissions of DPM, an identified TAC.

Air pollution does not affect every individual in the population in the same way, and some groups are more sensitive to adverse health effects than others. Land uses such as residences, schools, children's day care centers, hospitals, and nursing and convalescent homes are considered to be the most sensitive to poor air quality because the population groups associated with these uses have increased susceptibility to respiratory distress or, as in the case of residential receptors, their exposure time is greater than for other land uses. Exposure assessment guidance typically assumes that residences would be exposed to air pollution 24 hours per day, 350 days per year, for 70 years. Therefore, assessments of air pollutant exposure to residents typically result in the greatest adverse health outcomes of all population groups.

⁵⁰ California Air Resources Board (ARB). *Fact Sheet, The Toxic Air Contaminant Identification Process: Toxic Air Contaminant Emissions from Diesel-fueled Engines*, October 1998.

The project area is located within Sharp Park, which includes a golf course, many trails/two , and passive recreational areas. The nearest sensitive receptors from the HSP area, in which the proposed sediment and emergent vegetation removal and other project activities would occur, are residential uses located approximately 600 feet east and southeast of the project site. The nearest sensitive receptors from the area, in which the proposed realignment of the golf cart path would take place, are residential uses located approximately 350 feet northeast of the project site.

Off-road equipment (which includes construction-related equipment) is a large contributor to DPM emissions in California, although since 2007, the ARB has found the emissions to be substantially lower than previously expected.⁵¹ Newer and more refined emission inventories have substantially lowered the estimates of DPM emissions from off-road equipment such that off-road equipment is now considered the sixth largest source of DPM emissions in California.⁵² This reduction in emissions is due, in part, to effects of the economic recession and refined emissions estimation methodologies. For example, revised particulate matter (PM) emission estimates for the year 2010, of which DPM is a major component of, have decreased by 83 percent from previous estimates for the SFBAAB.⁵³ Approximately half of the reduction can be attributed to the economic recession and approximately half can be attributed to updated assumptions independent of the economic recession (e.g., updated methodologies used to better assess construction emissions).⁵⁴

Additionally, a number of federal and state regulations require cleaner off-road equipment. Specifically, both the USEPA and California have set emissions standards for new off-road equipment engines, ranging from Tier 1 to Tier 4. Tier 1 emission standards were phased in between 1996 and 2000 and Tier 4 Interim and Final emission standards for all new engines would be phased in between 2008 and 2015. To meet the Tier 4 emission standards, engine manufacturers will be required to produce new engines with advanced emission-control technologies. Although the full benefits of these regulations will not be realized for several years, the USEPA estimates that by implementing the federal Tier 4 standards, NO_x and PM emissions will be reduced by more than 90 percent.⁵⁵ Furthermore, California regulations limit maximum idling times to five minutes, which further reduces public exposure to DPM emissions.⁵⁶

Moreover, construction activities do not lend themselves to analysis of long-term health risks because of their temporary and variable nature. As explained in the BAAQMD's *CEQA Air Quality Guidelines*:

“Due to the variable nature of construction activity, the generation of TAC emissions in most cases would be temporary, especially considering the short amount of time such equipment is typically within an influential distance that would result in the exposure of sensitive receptors to substantial concentrations. Concentrations of mobile-source diesel PM emissions are typically reduced by 70 percent at a distance of approximately 500 feet (ARB 2005). In

⁵¹ ARB. *Staff Report: Initial Statement of Reasons for Proposed Rulemaking, Proposed Amendments to the Regulation for In-Use Off-Road Diesel-Fueled Fleets and the Off-Road Large Spark-Ignition Fleet Requirements*, p.1 and p. 13 (Figure 4), October 2010.

⁵² ARB. *Staff Report: Initial Statement of Reasons for Proposed Rulemaking, Proposed Amendments to the Regulation for In-Use Off-Road Diesel-Fueled Fleets and the Off-Road Large Spark-Ignition Fleet Requirements*, October 2010.

⁵³ ARB. *In-Use Off-Road Equipment, 2011 Inventory Model*, Query accessed online, April 2, 2012, http://www.arb.ca.gov/mseil/categories.htm#inuse_or_category.

⁵⁴ ARB. *Staff Report: Initial Statement of Reasons for Proposed Rulemaking, Proposed Amendments to the Regulation for In-Use Off-Road Diesel-Fueled Fleets and the Off-Road Large Spark-Ignition Fleet Requirements*, October 2010.

⁵⁵ United State Environmental Protection Agency (USEPA). “Clean Air Nonroad Diesel Rule: Fact Sheet,” May 2004.

⁵⁶ California Code of Regulations, Title 13, Division 3, § 2485.

addition, current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 9, 40, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities. This results in difficulties with producing accurate estimates of health risk."⁵⁷

In summary, project-level analyses of construction activities have a tendency to produce overestimated assessments of long-term health risks. As discussed above, DPM is a component of PM₁₀, which is often used as a surrogate for estimating DPM emissions. As shown above in Impact AQ-3, the proposed project's DPM emissions would be well below the criteria air pollutant significance thresholds; on-road heavy-duty diesel vehicles and off-road equipment would be used only temporarily during the approximate 60-day (over 18 months in accordance with the Biological Opinion) construction duration and would not expose sensitive receptors to substantial air pollutants. Furthermore, the proposed project's construction contractors would be required to comply with California regulations limiting idling to no more than five minutes, which would further reduce nearby sensitive receptor's exposure to temporary and variable DPM emissions. Therefore, construction period TAC emissions would result in a less-than-significant impact to nearby sensitive receptors.

Impact AQ-5: The proposed project would not create objectionable odors affecting a substantial number of people. (Less than Significant)

Organic material in soil can decompose through anaerobic processes⁵⁸ and generate methane and hydrogen sulfide gases, which can then be released into the environment once soil is exposed. Soil excavation and soil/vegetation removal associated with the proposed project would be minimal and temporary, and therefore would not generate odors that would affect a substantial number of people. Similarly, equipment exhaust could occasionally emit odors attributed to gasoline combustion, but any such odors would be temporary, limited only to the approximately 60-day (over 18 months in accordance with the Biological Opinion) construction period, and would cease upon completion of construction activities. Therefore, the proposed project's construction activities would not create objectionable odors affecting a substantial number of people and odor impacts would be less than significant.

Impact C-AQ: The proposed project, in combination with past, present, and reasonably foreseeable future development in the project area, would not make a considerable contribution to any cumulative significant air quality impacts. (Less than Significant with Mitigation)

As described in Impact AQ-3, regional air pollution is by its very nature largely a cumulative impact. Emissions from past, present and future projects contribute to the region's adverse air quality on a cumulative basis. No single project by itself would be sufficient in size to result in regional nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulative adverse air quality impacts.⁵⁹ The project-level thresholds for criteria air pollutants are based on levels by which new sources are not anticipated to contribute to an air quality violation or result in a cumulatively considerable net increase in criteria air pollutants. Therefore, because the proposed project's construction criteria air pollutant impact (Impact AQ-3) would not exceed the project-level thresholds for criteria air pollutants, the

⁵⁷ BAAQMD, *CEQA Air Quality Guidelines*, May 2011, page 8-6.

⁵⁸ Anaerobic process means a process which only occurs in the absence of molecular oxygen.

⁵⁹ BAAQMD, *CEQA Air Quality Guidelines*, June 2010; and adopted Thresholds of Significance, June 2010, p. 2-1. Available online at: http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Updated-CEQA_Guidelines.aspx. Accessed April 18, 2012.

proposed project would not result in a cumulatively considerable contribution to regional air quality impacts.

The project's temporary and incremental increase in DPM emissions resulting from construction activities would be minor and would not contribute substantially to cumulative concentrations of DPM or other toxic air contaminants that could affect nearby sensitive land uses.

With regard to fugitive dust emissions, these emissions result in a localized air quality impact as larger particulate matter particles tend to settle out of the atmosphere relatively close to dust generating activities. Construction of the proposed project is not anticipated to occur in proximity to other construction activities such that cumulative fugitive dust impacts would occur. However, should other construction activities occur concurrently and in close proximity to the project's construction activities, there is a potential, although a relatively low potential, for significant cumulative fugitive dust impacts. The proposed project would be required to comply with **Mitigation Measure M-AQ-2**, reducing the project's contribution to any potential cumulative fugitive dust impact to a less-than-significant level.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
8. GREENHOUSE GAS EMISSIONS—					
Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Gases that trap heat in the atmosphere are referred to as greenhouse gases (GHGs) because they capture heat radiated from the sun as it is reflected back into the atmosphere, much like a greenhouse does. The accumulation of GHGs has been implicated as the driving force for global climate change. The primary GHGs are carbon dioxide, methane, nitrous oxide, ozone, and water vapor.

Individual projects contribute to the cumulative effects of climate change by emitting GHGs during demolition, construction, and operational phases. While the presence of the primary GHGs in the atmosphere is naturally occurring, carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O) are largely emitted from human activities, accelerating the rate at which these compounds occur within earth's atmosphere. Emissions of carbon dioxide are largely by-products of fossil fuel combustion, whereas methane results from off-gassing associated with agricultural practices and landfills. Black carbon has recently emerged as a major contributor to global climate change, possibly second only to CO₂. Black carbon is produced naturally and by human activities as a result of the incomplete combustion of fossil fuels, biofuels and biomass.⁶⁰

⁶⁰ Center for Climate and Energy Solutions. *What is Black Carbon?*, April 2010. Available online at:

N₂O is a byproduct of various industrial processes and has a number of uses, including use as an anesthetic and as an aerosol propellant. Other GHGs include hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, and are generated in certain industrial processes. Greenhouse gases are typically reported in “carbon dioxide-equivalent” measures (CO₂E).⁶¹

There is international scientific consensus that human-caused increases in GHGs have and will continue to contribute to global warming. Many impacts resulting from climate change, including increased fires, floods, severe storms and heat waves, are occurring already and will only become more frequent and more costly.⁶² Secondary effects of climate change are likely to include a global rise in sea level, impacts to agriculture, the state’s electricity system, and native freshwater fish ecosystems, an increase in the vulnerability of levees in the Sacramento-San Joaquin Delta, changes in disease vectors, and changes in habitat and biodiversity.^{63,64}

The California Air Resources Board (ARB) estimated that in 2009 California produced about 457 million gross metric tons of CO₂E (MMTCO₂E).⁶⁵ The ARB found that transportation is the source of 38 percent of the State’s GHG emissions, followed by electricity generation (both in-state generation and imported electricity) at 23 percent and industrial sources at 18 percent. Commercial and residential fuel use (primarily for heating) accounted for nine percent of GHG emissions.⁶⁶ In the Bay Area, the transportation (on-road motor vehicles, off-highway mobile sources, and aircraft) and industrial/commercial sectors were the two largest sources of GHG emissions, each accounting for approximately 36 percent of the Bay Area’s 95.8 MMTCO₂E emitted in 2007.⁶⁷ Electricity generation accounts for approximately 16 percent of the Bay Area’s GHG emissions followed by residential fuel usage at seven percent, off-road equipment at three percent and agriculture at one percent.⁶⁸

Regulatory Setting

In 2005, in recognition of California’s vulnerability to the effects of climate change, then-Governor Schwarzenegger established Executive Order S-3-05, which sets forth a series of target dates by which statewide emissions of GHGs would be progressively reduced, as follows: by 2010, reduce GHG emissions to 2000 levels (approximately 457 MMTCO₂E); by 2020, reduce

<http://www.c2es.org/docUploads/what-is-black-carbon.pdf>. Accessed September 27, 2012.

⁶¹ Because of the differential heat absorption potential of various GHGs, GHG emissions are frequently measured in “carbon dioxide-equivalents,” which present a weighted average based on each gas’s heat absorption (or “global warming”) potential.

⁶² California Climate Change Portal. Available online at: <http://www.climatechange.ca.gov>. Accessed September 25, 2012.

⁶³ California Climate Change Portal. Available online at: <http://www.climatechange.ca.gov>. Accessed September 25, 2012.

⁶⁴ California Energy Commission. California Climate Change Center. *Our Changing Climate 2012*. Available online at: <http://www.energy.ca.gov/2012publications/CEC-500-2012-007/CEC-500-2012-007.pdf>. Accessed August 21, 2012.

⁶⁵ ARB. *California Greenhouse Gas Inventory for 2000-2009— by Category as Defined in the Scoping Plan*. Available online at: http://www.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_scopingplan_00-09_2011-10-26.pdf. Accessed August 21, 2012.

⁶⁶ ARB. *California Greenhouse Gas Inventory for 2000-2009— by Category as Defined in the Scoping Plan*. Available online at: http://www.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_scopingplan_00-09_2011-10-26.pdf. Accessed August 21, 2012.

⁶⁷ BAAQMD. *Source Inventory of Bay Area Greenhouse Gas Emissions: Base Year 2007*, February 2010. Available online at: http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/Emission%20Inventory/regionalinventory2007_2_10.ashx. Accessed August 21, 2012.

⁶⁸ BAAQMD. *Source Inventory of Bay Area Greenhouse Gas Emissions: Base Year 2007, Updated: February 2010*. Available online at: http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/Emission%20Inventory/regionalinventory2007_2_10.ashx. Accessed August 21, 2012.

emissions to 1990 levels (estimated at 427 MMTCO₂E); and by 2050 reduce statewide GHG emissions to 80 percent below 1990 levels (approximately 85 MMTCO₂E).

In response, the California legislature passed Assembly Bill No. 32 in 2006 (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 from forecast emission levels).⁶⁹

Pursuant to AB 32, ARB adopted a Scoping Plan in December 2008, outlining measures to meet the 2020 GHG reduction limits. The Scoping Plan is the State's overarching plan for addressing climate change. In order to meet these goals, California must reduce its GHG emissions by 30 percent below projected 2020 business as usual emissions levels, or about 15 percent from 2008 levels.⁷⁰ The Scoping Plan estimates a reduction of 174 million metric tons of CO₂E (MMTCO₂E) (about 191 million U.S. tons) from the transportation, energy, agriculture, forestry, and high global warming potential sectors, see Table 3, below. ARB has identified an implementation timeline for the GHG reduction strategies in the Scoping Plan.⁷¹

Table 3. GHG Reductions from the AB 32 Scoping Plan Sectors^{72,73}

GHG Reduction Measures By Sector	GHG Reductions (MMT CO₂E)
Transportation Sector	62.3
Electricity and Natural Gas	49.7
Industry	1.4
Landfill Methane Control Measure (Discrete Early Action)	1
Forestry	5
High Global Warming Potential GHGs	20.2
Additional Reductions Needed to Achieve the GHG Cap	34.4
Total	174
Other Recommended Measures	
Government Operations	1-2
Methane Capture at Large Dairies	1
Additional GHG Reduction Measures:	
Water	4.8
Green Buildings	26
High Recycling/ Zero Waste	
• Commercial Recycling	9
• Composting	
• Anaerobic Digestion	
• Extended Producer Responsibility	
• Environmentally Preferable Purchasing	
Total	41.8-42.8

⁶⁹ Governor's Office of Planning and Research (OPR). *Technical Advisory- CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review*, June 19, 2008. Available online at: <http://opr.ca.gov/docs/june08-ceqa.pdf>. Accessed August 21, 2012.

⁷⁰ ARB. *California's Climate Plan: Fact Sheet*. Available online at: http://www.arb.ca.gov/cc/facts/scoping_plan_fs.pdf. Accessed August 21, 2012.

⁷¹ ARB. *Assembly Bill 32: Global Warming Solutions Act*. Available online at: <http://www.arb.ca.gov/cc/ab32/ab32.html>. Accessed August 21, 2012.

⁷² ARB. *Climate Change Scoping Plan*, December 2008. Available online at: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed August 21, 2012.

⁷³ ARB. *California's Climate Plan: Fact Sheet*. Available online at: http://www.arb.ca.gov/cc/facts/scoping_plan_fs.pdf. Accessed August 21, 2012.

The AB 32 Scoping Plan recommendations are intended to curb projected business-as-usual growth in GHG emissions and reduce those emissions to 1990 levels. Therefore, meeting AB 32 GHG reduction goals would result in an overall annual net decrease in GHGs as compared to current levels and accounts for projected increases in emissions resulting from anticipated growth.

The Scoping Plan also relies on the requirements of Senate Bill 375 (SB 375) to implement the carbon emission reductions anticipated from land use decisions. SB 375 was enacted to align local land use and transportation planning to further achieve the State's GHG reduction goals. SB 375 requires regional transportation plans, developed by Metropolitan Planning Organizations (MPOs), to incorporate a "sustainable communities strategy" in their regional transportation plans (RTPs) that would achieve GHG emission reduction targets set by ARB. SB 375 also includes provisions for streamlined CEQA review for some infill projects such as transit-oriented development. SB 375 would be implemented over the next several years and the Bay Area Metropolitan Transportation Commission's 2013 RTP, Plan Bay Area, would be its first plan subject to SB 375.

AB 32 further anticipates that local government actions will result in reduced GHG emissions. ARB has identified a GHG reduction target of 15 percent from current levels for local governments themselves and noted that successful implementation of the Scoping Plan relies on local governments' land use planning and urban growth decisions because local governments have the primary authority to plan, zone, approve, and permit land development to accommodate population growth and the changing needs of their jurisdictions.⁷⁴ The BAAQMD has conducted an analysis of the effectiveness of the region in meeting AB 32 goals from the actions outlined in the Scoping Plan and determined that in order for the Bay Area to meet AB 32 GHG reduction goals, the Bay Area would need to achieve an additional 2.3 percent reduction in GHG emissions from the land use driven sector.⁷⁵

At a local level, the City has developed a number of plans and programs to reduce the City's contribution to global climate change. San Francisco's GHG reduction goals, as outlined in the 2008 Greenhouse Gas Reduction ordinance are as follows: by 2008, determine the City's GHG emissions for the year 1990, the baseline level with reference to which target reductions are set; by 2017, reduce GHG emissions by 25 percent below 1990 levels; by 2025, reduce GHG emissions by 40 percent below 1990 levels; and finally by 2050, reduce GHG emissions by 80 percent below 1990 levels. San Francisco's Greenhouse Gas Reduction Strategy documents the City's actions to pursue cleaner energy, energy conservation, alternative transportation and solid waste policies. As identified in the Greenhouse Gas Reduction Strategy, the City has implemented a number of mandatory requirements and incentives that have measurably reduced GHG emissions including, but not limited to, increasing the energy efficiency of new and existing buildings, installation of solar panels on building roofs, implementation of a green building strategy, adoption of a zero waste strategy, a construction and demolition debris recovery ordinance, a solar energy generation subsidy, incorporation of alternative fuel vehicles in the City's transportation fleet (including buses), and a mandatory recycling and composting ordinance.

The Greenhouse Gas Reduction Strategy concludes that San Francisco's policies and programs have resulted in a reduction in GHG emissions below 1990 levels, exceeding statewide AB 32

⁷⁴ ARB. *Climate Change Scoping Plan*. December 2008. Available online at:

http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed August 21, 2012.

⁷⁵ BAAQMD. *California Environmental Quality Act Guidelines Update, Proposed Thresholds of Significance*, December 2009. Available online at:

<http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/CEQA/Proposed%20Thresholds%20of%20Significance%20Dec%207%202009.ashx>. Accessed September 25, 2012.

GHG reduction goals. San Francisco’s communitywide 1990 GHG emissions were approximately 6,201,949 MTCO₂E. As stated above, San Francisco GHG emissions in 2010 were 5,299,757 MTCO₂E, which is a 14.5 percent reduction in GHG emissions compared to 1990 levels. The reduction has largely come from the electricity sector, from 2,032,085 MTCO₂E (year 1990) to 1,333,959 MTCO₂E (year 2010), and waste sector, from 472,646 MTCO₂E (year 1990) to 244,625 MTCO₂E (year 2010).⁷⁶

Impact C-GG: The proposed project would generate greenhouse gas emissions, but not in levels that would result in a significant impact on the environment or conflict with any policy, plan, or regulation adopted for the purpose of reducing greenhouse gas emissions. (Less than Significant)

The most common GHGs resulting from human activity associated with land use decisions are CO₂, CH₄, and N₂O.⁷⁷ Individual projects contribute to the cumulative effects of climate change by directly or indirectly emitting GHGs during construction and operational phases. As discussed in Section E.7, Air Quality, ongoing maintenance activities that result in operational GHG emissions (e.g., vehicle trips, etc.) are expected to be substantially similar to existing levels, and therefore operational GHG emissions would not measurably increase upon project completion. This analysis therefore focuses on GHG emissions that would be emitted during construction activities.

The project’s construction activities would contribute to temporary increases in GHGs emissions. During construction, which is anticipated to occur for approximately 60 days over 18 months in the appropriate construction window in accordance with the Biological Opinion, GHGs would be emitted from the combustion of fuel used for construction equipment, vehicles used for worker commuting, and trucks transporting materials to and from the project site.

CO₂E emissions from project construction activities were quantified using the CalEEMod modeling software (version CalEEMod.2011.1).⁷⁸ Results of this analysis indicate that the proposed project would emit 30 MTCO₂E during construction. While neither the BAAQMD, nor any other jurisdiction, has identified quantifiable thresholds for construction period GHG emissions, the BAAQMD, in their 2011 CEQA Air Quality Guidelines, did identify an operational GHG threshold of 1,100 MTCO₂E per year. Estimated construction emissions would be well below this level and would cease upon completion of construction activities. Thus, GHG emissions from the proposed project would result in a less-than-significant impact.

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
9. WIND AND SHADOW—Would the project:					

⁷⁶ San Francisco Department of Environment (SFDOE). *San Francisco Community -Wide Carbon Emissions by Category*, Excel spreadsheet provided via email between Pansy Gee, SFDOE and Wade Wietgreffe, San Francisco Planning Department, June 7, 2013.

⁷⁷ OPR. *Technical Advisory- CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review*, June 19, 2008. Available at the Office of Planning and Research’s website at: <http://www.opr.ca.gov/ceqapdfs/june08-ceqa.pdf>. Accessed March 3, 2010.

⁷⁸ CalEEMod. Available online at: <http://www.caleemod.com/>. Accessed February 26, 2013.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
a) Alter wind in a manner that substantially affects public areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact WS-1: The proposed project would not alter wind in a manner that substantially affects public areas. (No Impact)

The proposed project would not include construction of any above-ground structures that would alter wind patterns. The proposed project would not remove any structures or trees in a way that would result in substantial changes in wind patterns on the project site or in its vicinity. Therefore, the proposed project would not substantially alter wind patterns on the project site and in its vicinity, and no wind impact would result from the proposed project.

Impact WS-2: The proposed project would not create new shadow in a manner that could substantially affect outdoor recreation facilities or other public areas. (No Impact)

No new above-ground structures would be constructed except for the minor structures to be constructed around the pumphouse and realigned golf course path segment. Given the height and scale of these structures, no new shadow that would affect the use or enjoyment of Sharp Park would result from the proposed project. As a result, no shadow impact would result from the proposed project.

Impact C-WS: the proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, would not make a considerable contribution to any cumulative significant impacts related to wind or shadow. (Less than Significant)

As of September 2013, there are no known past or present projects in the project vicinity that would, in combination of the proposed project, result in cumulative wind or shadow impacts during the construction period of the proposed project. The Draft EIR prepared for the proposed 2006 SNRAMP, a reasonably foreseeable future project in the proposed project's vicinity, addressed potential ground-level wind hazards and windthrow risks resulting from tree removal and concluded that the proposed 2006 SNRAMP would not result in any significant impacts with respect to wind. The Initial Study prepared for the proposed 2006 SNRAMP concluded that the proposed 2006 SNRAMP would not result in any significant impacts with respect to shadow. Therefore, no cumulative wind or shadow impact within the project vicinity exists to which this project could potentially contribute.

The proposed project, as discussed above, would not substantially alter wind on the project site and in its vicinity and would have no impacts on shadow. Therefore, the proposed project would not contribute to a cumulative wind or shadow impact, even if one existed.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
10. RECREATION—Would the project:					
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Physically degrade existing recreational resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact RE-1: The proposed project would not physically degrade existing recreational resources or increase the use of existing neighborhood parks or other recreational facilities, such that substantial physical deterioration of the facilities would occur or be accelerated. (Less than Significant)

The proposed project would not close or substantially modify any portion of the Sharp Park Golf Course. The proposed project involves improvements to existing facilities and creation of habitat for CRLF and SFGS at Sharp Park. Most of the proposed activities, except for the realignment of the golf cart path segment, would occur in areas that are not used for recreation or are off limits to the public.

The realignment of the golf cart path segment would take approximately 5 days to complete. Given the small scale of this project and SFRPD's intent to provide continuous play during construction, the proposed project would not substantially affect recreational resources on the project site or in its vicinity, and therefore would not result in physical deterioration of Sharp Park or result in increased use of nearby parks.

In light of the above, this impact is less than significant.

Impact RE-2: The proposed project would not require construction or expansion of recreational facilities that would have an adverse physical effect on the environment. (No Impact)

The proposed project would not result in new uses that would increase the demand for parks or recreational facilities. Therefore, the proposed project would not require construction or expansion of recreational facilities, and would have no impact.

Impact C-RE: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, would not make a considerable contribution to any cumulative significant recreation impacts. (Less than Significant)

The Draft EIR prepared for the proposed 2006 SNRAMP, a reasonably foreseeable future project in the proposed project's vicinity, concluded that the proposed 2006 SNRAMP in combination with the GGNRA Dog Management Plan would result in a significant and unavoidable cumulative impact with respect to recreation as a result of closure of Dog Play Areas. However, dogs are not now, and will not under proposed project conditions, be allowed at Sharp Park, so

none of the significant recreation impacts identified in the Draft EIR for the proposed 2006 SNRAMP would combine with any element of the proposed project to result in a cumulatively considerable recreation impact.

As discussed above, the proposed project would not generate additional demand for parks or recreational facilities. Therefore, the proposed project would not contribute to a cumulative impact with respect to recreation.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
11. UTILITIES AND SERVICE SYSTEMS – Would the project:					
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supply available to serve the project from existing entitlements and resources, or require new or expanded water supply resources or entitlements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider that would serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact UT-1: Implementation of the proposed project would not significantly affect wastewater collection and treatment facilities or exceed wastewater treatment requirements of the SFRWQCB, and would not require or result in the construction of new stormwater drainage facilities or expansion of existing facilities. (No Impact)

The project would not generate wastewater or stormwater, and therefore would not result in the construction of new wastewater or stormwater facilities or the expansions of existing facilities.

Therefore, no impact would result from the proposed project with respect to wastewater collection or treatment facilities.

Impact UT-2: the proposed project would not require expansion or construction of new water supply or treatment facilities. (Less than Significant)

The project would likely require water for cleaning of construction equipment and may use water during construction to control fugitive dust as discussed in Section E.7, Air Quality. Additionally, the project could require water for irrigation of plants to ensure successful establishment (approximately once a month between June and September). Water would be provided by the existing golf course water source, which is municipal water provided by the North Coast County Water District.

The demand for such water use can be fully met by existing water supply capacity and would not require new or expanded water supply resources. Therefore, the proposed project's impacts on water supply would be less than significant.

Impact UT-3: The proposed project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs. (Less than Significant)

Minor quantities of solid waste and recyclable material would be generated during the construction of the proposed project. The sediment and vegetation removed from the site would be transported to the former rifle range site, on the east side of PCH, within Sharp Park. A small amount of construction debris would be generated from the demolition of the retaining wall and would be disposed of at a landfill with sufficient capacity that would be selected by the project contractor. As such, the project would not substantially impact landfill capacity.

Impact UT-4: The proposed project would follow all applicable statutes and regulations related to solid waste. (No Impact)

The proposed project would follow all applicable statutes and regulations related to solid waste, and therefore no impact would result from the proposed project.

Impact C-UT: the proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, would not make a considerable contribution to any cumulative significant impacts related to utilities or service systems. (Less than Significant)

As of September 2013, there are no known past or present projects in the project vicinity that would, in combination of the proposed project, result in cumulative impacts with respect to utilities and service systems. The Draft EIR prepared for the proposed 2006 SNRAMP, a reasonably foreseeable future project in the proposed project's vicinity, concluded that the proposed 2006 SNRAMP would not result in any significant impacts with respect to utilities or service systems.

The Final Draft Supplemental Initial Study/Mitigated Negative Declaration was prepared by the North Coast County Water District concerning the amended Sharp Park Recycled Water Project, which consists of construction of infrastructure necessary to provide tertiary treated water from Calera Creek Water Recycling Plant to irrigation sites in the Sharp Park area. The Final Draft Supplemental Initial Study/Mitigated Negative Declaration determined that with implementation of mitigation measures the amended Sharp Park Recycled Water Project would not result in any

significant impacts.⁷⁹ Thus, no cumulative impact to utilities or service systems within the project vicinity exists to which this project could potentially contribute.

The proposed project would not require a substantial amount of water and would not result in any significant impacts on utilities or service systems in the project area. Existing service management plans address anticipated growth in the region. The proposed project would not contribute to a cumulative impact on utilities and service systems, even if one existed.

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
12. PUBLIC SERVICES— Would the project:					
a) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any public services such as fire protection, police protection, schools, parks, or other services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact PS-1: The proposed project would not increase demand for fire protection or police service to an extent that would result substantial adverse impacts associated with the provision of such service. (No Impact)

The proposed project does not include any new habitable structures which would require fire protection and police services. Workers for the proposed project would consist of SFRPD employees and contractors, totaling approximately three to ten individuals. Potential increases in visitor use levels as a result of an improved Sharp Park, if any, would be adequately served by the existing capabilities of service providers. Therefore, no impact to fire protection or police service would result from the proposed project.

Impact PS-2: The proposed project would not indirectly generate new students, and would not require new or physically altered school facilities. (No Impact)

The project does not propose any new habitable structures, and therefore would not generate new students. Therefore, the project would not require a new school or expansion of school facilities and no impact to public schools would result from the proposed project.

Impact C-PS: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, would not make a considerable contribution to any cumulative significant effects related to public services. (No Impact)

⁷⁹ North Coast County Water District. *Draft Supplemental Initial Study/Mitigated Negative Declaration, North Coast County Water District Water Recycling Storage Tank Location Project*, July 2007. This document is available online at: <http://www.nccwd.com/Draft%20Supplemental%20July%202007.pdf>. Accessed August 29, 2013.

As of September 2013, there are no known past or present projects in the project vicinity that would, in combination of the proposed project, result in impacts to public. The Initial Study prepared for the proposed 2006 SNRAMP concluded that the proposed 2006 SNRAMP would not result in any significant impacts with respect to public services. Thus, no cumulative impact to public services within the project vicinity exists to which this project could potentially contribute.

Public service providers accommodate growth within their service areas by responding to forecasted population growth and land use changes. The proposed project would have no impacts to public services. Therefore, the proposed project would not contribute to a cumulative impact on public services, even if one existed.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
13. BIOLOGICAL RESOURCES –					
Would the project:					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Regulatory Setting

Endangered Species Act

The FESA (16 United States Code [USC], 1531-1543) was enacted in 1973. Under the FESA, the Secretary of the Interior and the Secretary of Commerce have the authority to list a species as threatened or endangered (16 USC Section 1533[c]). The FESA is administered by both the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) and the USFWS. NOAA NMFS is responsible for the protection of FESA-listed marine species, including marine fish, most marine mammals, and anadromous fish. The USFWS has jurisdiction over listed wildlife, plant, and commercial fish species and proposed or candidate species.

Pursuant to the requirements of the FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any FESA-listed threatened or endangered species may be present in the project site and determine whether the proposed project would have a potentially-significant impact on such species. In addition, the agency is required to determine whether the proposed project is likely to jeopardize the continued existence of⁸⁰ any species listed or proposed to be listed under the FESA or result in the destruction or adverse modification of critical habitat designated or proposed to be designated for such species (16 USC Section 1536). If so, project-related impacts to these species or their habitats would be considered significant and would require mitigation.

Section 9 of the FESA lists those actions that are prohibited, including take⁸¹ of listed species of fish and wildlife. "Take" of listed species can be authorized through either the Section 7 consultation process for actions undertaken by federal agencies, or through the Section 10 permit process for actions undertaken by non-federal agencies where a Section 404 permit or other federal approval is not required.

Federal actions include activities that are on federal land, conducted by a federal agency, funded by a federal agency, or authorized by a federal agency (including issuance of federal permits and licenses). Under Section 7, the federal agency conducting, funding, or permitting an action (the federal lead agency) must consult the NOAA NMFS or USFWS, as appropriate, to ensure that the proposed action will not jeopardize endangered or threatened species or destroy or adversely modify designated critical habitat. Regulations governing interagency cooperation under Section 7 are found at 50 Code of Federal Regulations (CFR), Part 402.

If a proposed project "may affect" a listed species or designated critical habitat, the project sponsor is required to prepare a Biological Assessment evaluating the nature and severity of the expected effect. In response, the NOAA NMFS or USFWS issues a Biological Opinion with a determination that the proposed action may either jeopardize the continued existence of one or more listed species (jeopardy finding), result in the destruction or adverse modification of critical habitat (adverse modification finding), not jeopardize the continued existence of any listed species (no jeopardy finding), or not result in adverse modification of critical habitat (no adverse modification finding). The Biological Opinion issued by the NOAA NMFS or USFWS may

⁸⁰ "Jeopardize the continued existence of" means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of the species. 50 Code of Federal Regulations (C.F.R.) §402.02.

⁸¹ FESA defines "take" as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." "Harm" is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns, such as breeding, feeding, or sheltering. "Harass" is further defined as actions that create the likelihood of injury to listed species to an extent that significantly disrupts normal behavior patterns, which include breeding, feeding, and sheltering.

stipulate discretionary “reasonable and prudent” conservation measures, and if the project would not jeopardize a listed species, the NOAA NMFS or USFWS issues an incidental take statement to authorize the proposed activity. Projects that would result in a “take” of a federally-listed threatened or endangered species would be required to obtain authorization from NOAA NMFS or USFWS through an incidental take permit.

The proposed improvements to the existing pumphouse and sediment and emergent vegetation removal activities would require a Section 404 permit pursuant to the FCWA, as described below. The USACE is the federal agency that issues a permit under Section 404 of the FCWA and thus establishes a federal nexus with the FESA, requiring Section 7 consultation. The SFRPD has already consulted with the USFWS under the Section 7 consultation process, and the USFWS issued a Biological Opinion in October, 2012 concerning the proposed project.⁸²

Clean Water Act

The FCWA (33 USC, 1251-1376) was enacted as an amendment to the Federal Water Pollution Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants into waters of the U.S. The FCWA serves as the primary federal law protecting the quality of the nation’s surface waters, including lakes, rivers, and coastal wetlands.

Waters of the U.S. are areas subject to federal jurisdiction pursuant to Section 404 of the FCWA. In order to be protected under the FCWA Sections 404 and 401, wetlands and other waters of the U.S. must be classified as one of the following:⁸³

- Traditional navigable waters;
- Wetlands next to traditional navigable waters;
- Nonnavigable tributaries of traditional navigable waters that are relatively permanent, where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months); or
- Wetlands that directly abut the tributaries described in the previous bullet.

The USACE would decide jurisdiction over the following waters, based on a fact-specific analysis, to determine whether they have a significant nexus with a traditional navigable water:⁸⁴

- Nonnavigable tributaries that are not relatively permanent;
- Wetlands next to nonnavigable tributaries that are not relatively permanent; or
- Wetlands next to but that do not directly abut a relatively permanent nonnavigable tributary.

Waters of the U.S. are typically divided into two types: 1) wetlands and 2) other waters of the U.S. Wetlands are “areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR Section 328.3[b], 40 CFR Section 230.3). To be considered subject to federal jurisdiction, a wetland must normally support hydrophytic vegetation (plants growing in water or wet soils), hydric soils, and

⁸² USFWS. *Biological Opinion*. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

⁸³ U.S. Army Corps of Engineers (USACE). *Revised Guidance on Clean Water Act Jurisdiction Following the Supreme Court Decision in *Rapanos v. U.S.* and *Carabell v. U.S.**, December 2, 2008. Available online at: <http://www.usace.army.mil/missions/civilworks/regulatoryprogramandpermits/relatedresources/cwaguidance.aspx>. Accessed May 17, 2013.

⁸⁴ Ibid.

wetland hydrology.⁸⁵ Other waters of the U.S. are seasonal or perennial water bodies, including lakes, stream channels, drainages, ponds, and other surface water features, that exhibit an ordinary high-water mark but lack positive indicators for the three wetland parameters (33 CFR Section 328.4).

Under FCWA Section 401, applicants for a federal license or permit to conduct activities that may result in the discharge of a pollutant into waters of the U.S. must obtain certification from the state in which the discharge would originate or, if appropriate, from the interstate water pollution control agency with jurisdiction over affected water at the point where the discharge would originate. The California Regional Water Quality Control Boards (RWQCBs) administer this certification. Therefore, all projects that have a federal component and that may affect state water quality (including projects that require federal agency approval, such as issuance of a Section 404 permit) must also comply with FCWA Section 401.

FCWA Section 402 authorizes the USEPA to regulate water quality in California by controlling the discharge of pollutants to water bodies from point sources (a municipal or industrial discharge at a specific location or pipe) and nonpoint sources (diffuse runoff of water from adjacent land uses) through the NPDES. Federal regulations issued in November 1990 and revised in 2003 expanded the authority of the California State Water Resources Control Board to permit stormwater discharges from municipal storm sewer systems, industrial processes, and construction sites that disturb areas larger than one acre. Within the San Francisco limits, NPDES permits are administered by the SFBRWQCB.

FCWA Section 404 regulates the discharge of dredged and fill materials into waters of the U.S. Applicants must obtain a permit from the USACE for discharges of dredged or fill material into waters of the U.S., including wetlands, before proceeding with a proposed activity. The USACE may issue either an individual permit evaluated on a case-by-case basis or a general permit evaluated at a program level for a series of related activities. General permits are preauthorized and are issued to cover multiple instances of similar activities expected to cause only minimal adverse environmental effects. Nationwide permits (NWP) are a type of general permit issued to cover particular activities that would result in the deposition of fill material into waters of the U.S. Each NWP specifies particular conditions that must be met for the NWP to apply to a particular project. Waters of the U.S. in the project area are under the jurisdiction of the San Francisco District of the USACE.

Implementing regulations by the USACE are found at 33 CFR, Parts 320-330. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines and were developed by the USEPA in conjunction with the USACE (40 CFR, Part 230). The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

The proposed project would require a Section 404 CWA NWP for the proposed work within the jurisdictional wetlands.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC, 703-711) implements a treaty signed by the United States, Canada, Mexico, and Japan that makes it unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, or kill migratory birds. The law also applies to the removal of nests (such as swallow nests on bridges) occupied by migratory birds during the

⁸⁵ USACE. *Corps of Engineers Wetland Delineation Manual*, January 1987. Available online at: <http://el.erdc.usace.army.mil/elpubs/pdf/wlman87.pdf>. Accessed May 17, 2013.

breeding season. The MBTA states that it is unlawful to take these species, their nests, their eggs, or their young anywhere in the United States.

California Endangered Species Act (CESA)

CESA (Fish & Game Code Section 2050, et seq.), which is administered by the CDFW,⁸⁶ prohibits the take⁸⁷ of plant and animal species designated by the Fish and Game Commission as either threatened or endangered in the State of California. Section 2081 of CESA allows the CDFW to authorize exceptions to the state's prohibition against take of a listed species, such as for educational, scientific, or management purposes. Private developers whose projects do not involve a state lead agency under CEQA may not take a listed species without formally consulting with the CDFW and agreeing to strict measures and standards for protection of listed species.

Species in the project area, CRLF, WPT, salt marsh common yellowthroat, and San Francisco dusky-footed woodrat are not formally designated as threatened or endangered under the CESA, but are considered a California SSC. No formal consultation with the CDFW under the CESA is required for this project.

California Fish and Game Code

Sections 1600-1616

Under these sections of the Fish and Game Code, CDFW jurisdiction is determined to occur within the water body of any natural river, stream, or lake. The term stream, which includes creeks and rivers, is defined in Title 14, CCR, Section 1.72. The applicant is required to notify CDFW before constructing any project that would divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Preliminary notification and project review generally occur during the environmental review process. When a fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resource. These modifications are formalized in a Streambed Alteration Agreement that becomes part of the plans, specifications, and bid documents for the project. The proposed project would require a Streambed Alteration Agreement from the CDFW.

Sections 3511, 4700, 5515, and 5050

The classification of fully protected species was the state's initial effort to identify and provide additional protection to those animals that were rare or that faced possible extinction. Lists were created for fish, amphibians and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under either the state or federal endangered species act or both, although there are several exceptions, including the golden eagle. The Fish and Game Code sections dealing with fully protected species state that these species "...may not be taken or possessed at any time and no provision of this code or any other law would be construed to authorize the issuance of permits or licenses to take any fully protected" species, although take may be authorized for necessary scientific research. This language arguably makes the "fully protected" designation the strongest and most restrictive regarding the take of these species. In 2003, the code sections dealing with fully protected species were amended to allow the CDFW to authorize the taking of those species for necessary scientific research, including efforts to recover fully protected, threatened, or endangered species.

SFGS is a fully protected species under the CESA and the proposed project, which is designed to enhance habitat for this species and its primary food source, CRLF, constitutes a recovery action

⁸⁶ Formally known as the CDFG

⁸⁷ "Take" in the context of CESA means to hunt, pursue, kill, or capture a listed species, as well as any other actions that may result in adverse impacts when attempting to take individuals of a listed species. The take prohibitions also apply to candidates for listing under CESA.

pursuant to the Fish and Game Code. The SFRPD is required to consult with the CDFW prior to implementation of the proposed project.

Sections 3503 and 3513

Section 3503 prohibits the take and possession of any bird egg or nest, except as otherwise provided by the Fish and Game Code or subsequent regulations. Further, Section 3513 provides for the adoption of the MBTA's provisions. As with the MBTA, this state code offers no statutory or regulatory mechanism for obtaining an incidental take permit for the loss of nongame migratory birds. The administering agency for these sections is the CDFW.

Environmental Setting

The proposed project would be implemented entirely within Sharp Park (see Figure 3). Sharp Park provides habitat which supports several special-status species and high natural resource and recreational values that include Sanchez Creek, a free-flowing creek, LS, a large brackish lake, and associated wetlands including HSP and the connecting channel. It is situated between two regionally significant open spaces, Milagra and Sweeney Ridges. Sharp Park also provides: regionally important wildlife habitat and connections between habitat, attractive habitat for resident and migratory birds, and significant stands of coastal scrub habitat.

The information contained in this section is based on the information contained in the Biological Assessment⁸⁸ prepared by the SFRPD for this project, the Biological Opinion issued by the USFWS in October 2012 for this project, and two wetland delineation reports^{89,90} prepared in November 2008 and May 2013.

Special-Status Species

The analysis of special-status species in this Initial Study addresses all special-status species anticipated to occur within the project area. For the purposes of this Initial Study, the term "special-status species" includes species that are: 1) legally protected by the FESA, CESA, or MBTA; or 2) locally significant sensitive species, including species on the National Audubon Society's Watch List or those under threat of local extirpation, as determined by the Yerba Buena chapter of the California Native Plant Society (CNPS) or the Golden Gate chapter of the National Audubon Society. State and federally listed species known to occur or that have been recorded historically in the project vicinity are presented in Table 4, below.

Legally protected species include species that are federally listed as endangered, threatened, or candidate species,⁹¹ that are state listed as endangered, rare, threatened, California fully protected, or SSC, or that are listed in the MBTA. Protected species also include those listed as 1A or 1B on the CNPS plant list; that is, the 1A list is for plants presumed extirpated in California, and the 1B list is for plants that are rare, threatened, or endangered in California and elsewhere.

⁸⁸ SFRPD. *Biological Assessment*. This Biological Assessment was amended on August 16, 2012. These documents are available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

⁸⁹ Tetra Tech, Inc. *LS Wetland Determination Report*. This report is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

⁹⁰ SFRPD. *Single Parameter Wetland Delineation Report*. This document is available for as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

⁹¹ "Candidate species" are plants and animals for which the USFWS has sufficient information on their biological status and threats to propose them as endangered or threatened under the FESA, but for which development of a proposed listing regulation is precluded by other higher priority listing activities.

No special-status plant species that are required to be addressed under CEQA Guidelines 15380⁹² are known to occur within the project area.

The species from all lists are important for local conservation efforts and thus are analyzed in this Initial Study. However, impacts to federal, state, and CNPS 1A and 1B listed species are given additional consideration because of their protected status by federal and/or state laws.

The Biological Opinion issued by the USFWS for the proposed project concluded that the proposed project would not be likely to adversely affect the mission blue butterfly (*Icaricia icarioides missionensis*) given that the project site is located at least 0.5 miles away from mission blue butterfly habitat and the mission blue butterfly is not expected to occur in the intervening areas.⁹³ The former rifle range site, to which the removed sediment and debris would be transported, is located approximately 0.4 miles from the closest known potential habitat for the mission blue butterfly.⁹⁴ Therefore, this Initial Study concludes that no impact would result from the proposed project. Thus, this species is not addressed further in this Initial Study.

The CNDDDB reports the occurrence of the bumblebee scarab beetle (*Lichnanthe ursina*) within Sharp Park. This species is not federally listed, but was a candidate for listing in the early 1990s. According to the CNDDDB, specimens were collected from dunes near LS and although the collection date is unknown, the population is presumed to be extant. The larval stage of this species lives in sand layers, while the adult phase prefers coastal dunes. As the proposed project would affect a very limited extent of coastal dune areas of Sharp Park and would not occur in the beach areas, it would not have a substantial impact on this species.

In addition to those species listed in Table 4, a number of bird species breed or occur at Sharp Park. Some of these bird species are designated as Species of Local Concern by the Golden Gate Audubon Society including: American goldfinch; American kestrel; band-tailed pigeon; black-crowned night heron; clark's grebe; gadwall; great horned owl; hairy woodpecker; hutton's vireo; pacific-slope flycatcher; pied-billed grebe; purple finch; red-shouldered hawk; red-tailed hawk; say's phoebe; steller's jay; swainson's thrush; tree swallow; and violet-green swallow.⁹⁵ Some of these bird species inhabit primarily forests or woodlands, which are a substantial distance away from the project area. Others may nest in the wetland and coastal scrub habitats present in the project area.

⁹² CEQA Guidelines Section 15380 provides that a plant or animal species may be treated as rare or endangered even if it is not on one of the official lists but otherwise meets the criteria for an endangered or rare species (e.g., it is likely to become endangered in the foreseeable future). For this reason, this Initial Study also addresses locally significant species, which include species on CNPS List 2A (plants presumed extirpated in California, but more common elsewhere), CNPS List 2B (plants rare, threatened, or endangered in California, but more common elsewhere), CNPS List 3 (plants about which more information is needed), and CNPS List 4 (plants of limited distribution).

⁹³ USFWS. *Biological Opinion*. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

⁹⁴ Lisa Wayne, SFRPD. *Email to Kei Zushi, San Francisco Planning Department, MBB: Sharp Park*, July 16, 2013. This email is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

⁹⁵ EIP Associates (EIP). *Final Draft 2006 SNRAMP, Sharp Park, February 2006*. Available online at: <http://sfrecpark.org/parks-open-spaces/natural-areas-program/significant-natural-resource-areas-management-plan/snramp/>. Accessed September 11, 2013.

Table 4. Listed species that could potentially occur in the Project Area^{96,97,98}

Common Name	Scientific Name	Federal/State/ CNPS Status	Habitat	Likelihood of Occurrence/Notes on Occurrence
Reptiles and Amphibians				
California red- legged frog	<i>Rana aurora draytonii</i>	FT/SSC/--	Lowlands and foothills in or near permanent sources of deep water, with dense, shrubby, or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development.	C/ Recently observed at Sharp Park.
San Francisco garter snake	<i>Thamnophis sirtalis elegans</i>	FE/SE, SFP/--	Freshwater marshes, ponds, and slow- moving streams. Prefers dense cover and water depths of at least one foot.	C/ Reported near HSP in 2008.
Western pond turtle	<i>Clemmys marmorata</i>	--/SSC/--	Ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Needs basking sites and upland habitat for egg-laying. ⁹⁹	C/ Presumed to occur at Sharp Park.
Birds				
Salt marsh common yellowthroat	<i>Geothlypis trichas sinuosa</i>	--/SSC/--	Saltwater and freshwater marshes. Requires thick cover for foraging and dense vegetation for nesting. ¹⁰⁰	C/ Presently occurs at Sharp Park.

⁹⁶ USFWS. *Biological Opinion*. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

⁹⁷ USFWS. *Species*. Available online at: <http://www.fws.gov/species/>. Accessed July 11, 2013.

⁹⁸ CDFG. *California Natural Diversity Database, Special Animals (898 Taxa)*, January 2011. Available online at: <http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/spanimals.pdf>. Accessed July 11, 2013.

⁹⁹ Swaim Biological Incorporated. *Sharp Park Wildlife Surveys and Special Status Reptile and Amphibian Restoration Recommendations*, December 4, 2008 ("Sharp Park Wildlife Surveys"). This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹⁰⁰ Shuford, W. D., and Gardali, T., editors, Western Field Ornithologists and CDFG. *California Bird Species of Special Concern: A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California*, *Studies of Western Birds* No. 1, February 2008. Available online at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentVersionID=19854>. Accessed July 12, 2013.

Black-crowned night heron	<i>Nycticorax nycticorax</i>	--/SA/--	Foothills and lowlands. Nesting takes place in thick-foliaged trees, dense fresh or brackish emergent wetlands, or dense shrubbery or vines near aquatic feeding areas. ¹⁰¹	P/ Presently occurs at Sharp Park.
Mammals				
San Francisco dusky-footed woodrat	<i>Neotoma fuscipes annectens</i>	--/SSC/--	Riparian and oak woodland forests with dense understory cover or thick chaparral habitat. ¹⁰²	U/ Observed in Sharp Park, only on the east side of PCH.
Insects				
Myrtle's silverspot butterfly	<i>Speyeria zerene myrtleae</i>	FE/--/--	Coastal dunes, coastal prairie, and coastal scrub at elevations ranging from sea level to 1,000 feet, and as far as three miles inland. The adult butterflies prefer areas protected from onshore winds. Critical factors in the distribution of this species include presence of the presumed larval host plant, western dog violet (<i>Viola adunca</i>), and availability of nectar sources for adults. ¹⁰³	U/ The CDFW's Natural Diversity Database indicates that this species was extirpated. By the late 1970s populations of this species south of the Golden Gate Bridge were believed to be extinct and extant populations were known only from Marin County at the Point Reyes National Seashore. ¹⁰⁴
San Bruno elfin butterfly	<i>Callophrys mossii bayensis</i>	FE/--/--	Coastal chaparral, on steep north facing slopes, and in the fog-belt of the mountains near San Francisco Bay. This species closely follows the narrow, fragmented distribution of its larval host	U/ There are no rocky substrates or grassland habitats that contain the host plant for this species in the project area or its vicinity.

¹⁰¹ CDFW. Stanislaus River Report, Black-crowned Night Heron. Available online at: <http://www.dfg.ca.gov/delta/reports/stanriver/sr437.asp>. Accessed July 11, 2013.

¹⁰² H. T. Harvey & Associates. Junipero Serra Traffic Calming Project Biological Resources Project, Project No. 3283-01, September 26, 2011. This document is available for review as part of Case File No. 2012.1247E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹⁰³ USFWS. Recovery Plan for Seven Coastal Plants and the Myrtle's Silverspot Butterfly, September 29, 1998. Available online at: http://ecos.fws.gov/docs/recovery_plan/980930d.pdf. Accessed July 11, 2013.

¹⁰⁴ Ibid.

			plant, broadleaf stonecrop (<i>Sedum spathulifolium</i>). ¹⁰⁵	
Bay checkerspot butterfly	<i>Euphydryas editha bayensis</i>	FT/--/--	Native grasslands on very large serpentine outcrops; secondary or “satellite” habitat islands of smaller serpentine outcrops with native grassland; and “tertiary” habitat areas, where both larval food plants occur on soils not derived from serpentine, but which have similarities to serpentine-derived soils. ¹⁰⁶	U/ There is no serpentine grassland habitat or grasslands supporting larval food plants of the bay checkerspot butterfly in the project area or its vicinity.
Plants				
San Francisco Bay spineflower	<i>Chorizanthe cuspidata</i> var. <i>cuspidata</i>	--/--/CNPS List 1B	Barren, disturbed sites on loose mineral soils. This species has been found in coastal prairie, coastal dune, coastal scrub, and coastal bluff scrub habitats. It occurs in Sonoma, Marin, San Francisco, San Mateo, and possibly Santa Clara counties; it is believed to have been extirpated in Alameda County. ¹⁰⁷	U/ Last observed in 1925 in Sharp Park. Presumed extirpated from Sharp Park. ¹⁰⁸

¹⁰⁵ USFWS. *San Bruno Elfin Butterfly and Mission Blue Butterfly, 5-year Review: Summary and Evaluation*, February 2010. Available online at: http://ecos.fws.gov/docs/five_year_review/doc3216.pdf. Accessed July 11, 2013.

¹⁰⁶ USFWS. *Recovery Plan for Serpentine Soil Species of the San Francisco Bay Area*, September 30, 1998. Available online at: http://ecos.fws.gov/docs/recovery_plan/980930c_v2.pdf. Accessed July 11, 2013.

¹⁰⁷ Michael Wood, California Native Plant Society (CNPS), Yerba Buena Chapter. *Focus on Rarities* (from the quarterly Yerba Buena Chapter Newsletter), *San Francisco Bay spineflower*, September 1997. Available online at: http://www.cnps-yerbabuena.org/experience/focus_on_rarities.html#pageTop. Accessed July 11, 2013.

¹⁰⁸ CDFG. *Natural Diversity Database. Chorizanthe cuspidata* var. *cuspidata*, *San Francisco Bay spineflower*. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

Federal Status

FE = Endangered. Species in danger of extinction throughout all or a significant portion of its range.

FT = Threatened. Species likely to become endangered within foreseeable future throughout all or a significant portion of its range.

California State Status

SE = Endangered. Species whose continued existence in California is jeopardized.

SSC = Species of Special Concern

SFP = State Fully Protected under Sections 3511 and 4700 of the Fish and Game Code.

SA = Special Animal

California Native Plant Society

1A = Plants presumed extirpated in California

1B = Plants that are rare, threatened, or endangered in California and elsewhere

2A = Plants presumed extirpated in California, but more common elsewhere

2B = Plants rare, threatened, or endangered in California, but more common elsewhere

3 = Plants about which more information is needed

4 = Plants of limited distribution (a watch list)

LS = Locally Significant

Occurrence

P = Potential

C = Confirmed

U = Unlikely

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The following provides a description of the biology of special-status species that are known to occur on the project site or in its vicinity.

San Francisco Garter Snake

SFGS was listed as an endangered species under the FESA on March 11, 1967 and was listed as endangered by the State of California in 1971. SFGS is a fully protected species under California law. Historically, SFGSs occurred in scattered wetland areas on the San Francisco Peninsula from approximately the San Francisco County line south along the eastern and western bases of the Santa Cruz Mountains, at least to the Upper Crystal Springs Reservoir, and along the coast south to Año Nuevo Point in San Mateo County, and Waddell Creek in Santa Cruz County, California. Currently, the species has been reduced to only six significant populations in San Mateo County and northern Santa Cruz County. These sites include Pescadero Marsh, Año Nuevo, the San Francisco State Fish and Game Refuge, San Francisco Airport/Milbrae, Sharp Park Golf Course at Laguna Salada, and Cascade Ranch. There are two significant components to SFGS habitat, which include: 1) ponds that support CRLF and Pacific tree frogs; and 2) surrounding upland habitat that supports burrowing mammals such as Botta's pocket gopher and California vole. The preferred habitat of SFGS is vegetated ponds with an open water component near open hillsides where they can sun themselves, feed, and find cover in rodent burrows. SFGS avoids brackish marsh areas because their preferred prey base, primarily CRLF and Pacific tree frogs, have low tolerance to saline conditions. Adult SFGS sometimes overwinters and aestivates (passes the summer in a state of torpor) in rodent burrows during summer months when the ponds are dry. Mating occurs during both the spring and fall, but principally during the first few warm days of March.¹⁰⁹

California Red-legged Frog

CRLF is a federally listed threatened species and California SSC. CRLF was listed as a threatened species on May 23, 1996. A Recovery Plan was published for CRLF on September 12, 2002. The historic range of CRLF extended from the vicinity of Elk Creek in Mendocino County, California, along the coast inland to the vicinity of Redding in Shasta County, California, and southward to northwestern Baja California, Mexico. CRLF predominately inhabits permanent water sources such as streams, lakes, marshes, natural and manmade ponds, and ephemeral drainages in valley bottoms and foothills up to 4,921 feet in elevation. They also inhabit ephemeral creeks, drainages, and ponds with minimal riparian and emergent vegetation. CRLF breeds from November to April, although earlier breeding records have been reported in southern localities. Breeding generally occurs in still or slow-moving water often associated with emergent vegetation, such as cattails, tules or overhanging willows. Sheltering habitat for CRLF potentially includes all aquatic, riparian, and upland areas within the range of the species and includes any landscape feature that provides cover, such as animal burrows, boulders or rocks, organic debris such as downed trees or logs, and industrial debris. CRLF does not have a distinct breeding migration. Dispersal distances are typically less than 0.5 miles, with a few individuals moving up to 1 to 2 miles.^{110,111}

Western Pond Turtle

While the federal government does not list WPT, WPT is a California SSC. Historically, this species was relatively continuously distributed in most Pacific slope drainages, from Klickitat County, Washington, along the Columbia River to northern Baja California, Mexico. In

¹⁰⁹ USFWS. *Biological Opinion*. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹¹⁰ CDFG. *Amphibian and Reptile Species of Special Concern in California*, 1994. Available online at: http://www.dfg.ca.gov/wildlife/nongame/publications/docs/herp_ssc.pdf. Accessed April 9, 2013.

¹¹¹ USFWS. *Biological Opinion*. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

California, it was historically present in most Pacific slope drainages between the Oregon and Mexican borders. WPT requires still or slow water. This aquatic turtle usually leaves the aquatic site to reproduce and aestivates, and overwinters. WPT may overwinter on land or in water, or they may remain active in water during the winter. Mating typically occurs in late April or early May, but may occur year-round.¹¹²

Salt Marsh Common Yellowthroat

The salt marsh common yellowthroat is one of 12 subspecies of the common yellowthroat recognized north of Mexico, and is listed as a California SSC. This subspecies is in decline due to loss of wetlands. The salt marsh common yellowthroat feeds on invertebrates and seeds, and is known as one of the three most frequent hosts of the cowbird, which lays its own eggs in the nests of other bird species.¹¹³

Black-crowned Night Heron

The black-crowned night heron is designated as a Special Animal by the CDFW. This bird species is a fairly common year-long resident of the foothills and lowlands throughout most of California. Nesting takes place in thick-foliaged trees, dense fresh or brackish emergent wetlands, or dense shrubbery or vines near aquatic feeding areas. The black-crowned night heron feeds primarily at night. Foraging is conducted largely along the margins of lacustrine, riverine, and fresh and saline emergent wetlands.¹¹⁴

San Francisco Dusky-footed Woodrat

The San Francisco dusky-footed woodrat occurs in a variety of woodland and scrub habitats throughout the South Bay and the adjacent central coast range, south to the Pajaro River in Monterey County. Woodrats prefer riparian and oak woodland forests with dense understory cover or thick chaparral habitat. Dusky-footed woodrats build large, complex nests of sticks and other woody debris, which may be maintained by a series of occupants for several years. Woodrats are also very adept at making use of human-made structures and can nest in electrical boxes, pipes, wooden pallets, and even portable storage containers. While the San Francisco dusky-footed woodrat is described as a generalist omnivore, individuals may specialize on local plants that are available for forage. The breeding season for dusky-footed woodrats begins in February and sometimes continues through September, with females bearing a single brood of one to four young per year.¹¹⁵

Migratory Fish and Birds

Some small fish species, such as sculpin, have been observed in LS and HSP. Other species such as mosquitofish may also occur. Many migratory birds use some areas of Sharp Park for foraging, nesting, and perching habitat.

Wildlife Corridors

Sharp Park is bordered in part by undeveloped areas, including Sweeney and Milagra Ridges, which allows it to serve as a relatively undisturbed corridor for wildlife, particularly birds. Sharp Park's connectivity to high-quality natural habitats also allows it to support medium size and

¹¹² Swaim Biological Incorporated. *Sharp Park Wildlife Surveys*. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹¹³ Ibid.

¹¹⁴ CDFW. *Stanislaus River Report, Black-crowned Night Heron*. Available online at: <http://www.dfg.ca.gov/delta/reports/stanriver/sr437.asp>. Accessed July 11, 2013.

¹¹⁵ H. T. Harvey & Associates. *Junipero Serra Traffic Calming Project Biological Resources Project, Project No. 3283-01*, September 26, 2011. This document is available for review as part of Case File No. 2012.1247E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

large mammals, including numerous general wildlife species, such as the black-tailed deer, bobcat, common porcupine, coyote, and mountain lion.

Native Wildlife Nursery Sites

Many areas in Sharp Park support potential or confirmed native bird nesting habitat and potential breeding habitat for other wildlife species. Native birds that may nest within this portion of Sharp Park include waterbirds, songbirds, and raptors and include such habitats as wetlands, grasslands, riparian scrub, and coastal scrub.

Habitat Types

Several different types of wetlands are present within Sharp Park, such as free-flowing creeks, open water, wet meadow, willow scrub, and freshwater marsh. Habitat types within or adjacent to the project area include coastal scrub, non-native grasslands, and wetlands. The area in which the proposed pond would be constructed is generally characterized as coastal scrub. The areas near the former rifle range site on the east side of PCH are generally covered with non-native grasslands.

Areas that meet the USACE criteria for wetlands or other waters of the U.S. may be protected under Section 1600 of the California Fish and Game Code and thus may be regulated by the CDFW. In addition, these areas are considered wetlands and thus are protected under the CCA. The USEPA and USACE assert jurisdiction over the following waters:¹¹⁶

- Traditional navigable waters;
- Wetlands next to traditional navigable waters;
- Nonnavigable tributaries of traditional navigable waters that are relatively permanent, where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months); or
- Wetlands that directly abut the tributaries described in the previous bullet.

Under the CCA, an area is classified as a wetland if it meets only one of the three parameters required by Section 404 of the FCWA definition of a wetland: hydric soils, hydrophytic vegetation, or wetland hydrology.¹¹⁷ Some wetlands may also meet criteria as “waters of the state” and be regulated by the SFBWRQCB.

In November 2008 a wetland delineation report was prepared for the LS wetland complex. Most of the wetlands delineated were characterized as freshwater marsh (19.56 acres), followed by wet meadow (2.44 acres) and willow scrub (0.93 acres).¹¹⁸ These areas meet the USACE criteria for classification as wetlands. The unvegetated open water (4.49 acres) meets the USACE criteria for “other waters of the U.S.,” due to the presence of an ordinary high water mark. In March 2009, the USACE confirmed this wetland delineation report.¹¹⁹ All of these wetlands also meet the CCA criteria.

¹¹⁶ USACE. *Revised Guidance on Clean Water Act Jurisdiction Following the Supreme Court Decision in Rapanos v. U.S. and Carabell v. U.S.*, December 2, 2008. Available online at: <http://www.usace.army.mil/missions/civilworks/regulatoryprogramandpermits/relatedresources/cwaguidance.aspx>. Accessed May 17, 2013.

¹¹⁷ USACE. *Corps of Engineers Wetland Delineation Manual*, January 1987. Available online at: <http://el.erdc.usace.army.mil/elpubs/pdf/wolman87.pdf>. Accessed May 17, 2013.

¹¹⁸ Tetra Tech, Inc. *LS Wetland Determination Report*. This report is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹¹⁹ USACE. *Letter to Ms. Kelly Bayer, Tetra Tech, Inc., Subject: File Number 2009-00044S*, March 9, 2009. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

Another wetland delineation report was prepared in May 2013 that evaluated wetlands located within the proposed project area that meet the CCA-only criteria.¹²⁰ The May 2013 wetland delineation report found that the proposed project would not affect any CCA-only wetlands. The acreage of each jurisdictional habitat type within the LS wetland complex is shown in Table 5, below.

Table 5. Wetland Habitat Types in LS Wetland Complex^{121,122}

Habitat Type	Determination	Jurisdiction	Area (Acres)
Freshwater marsh	Wetlands	USACE/CCA	19.56
Willow scrub	Wetlands	USACE/CCA	0.93
Wet meadow	Wetlands	USACE/CCA	2.44
Unvegetated pond	Other Waters of the U.S.	USACE/CCA	4.49
Total wetlands/waters			27.46

Project Impacts

USFWS's Biological Opinion

A Biological Assessment was prepared by the SFRPD for the proposed project to facilitate a consultation, pursuant to Section 7 of the FESA.¹²³ Based on this Biological Assessment, the USACE's October 25, 2011 request for the initiation of formal consultation with the USFWS, numerous phone calls and emails between the SFRPD and USFWS, and other information available to the USFWS, the USFWS prepared and issued a Biological Opinion regarding this project under the authority of the FESA.¹²⁴ The Biological Opinion describes the proposed project,¹²⁵ evaluates the potential effect of the proposed project on CRLF and SFGS, and identifies Conservation Measures that would reduce impacts to federally-listed species.¹²⁶ The Biological

¹²⁰ SFRPD. *Single Parameter Wetland Delineation Report*. This document is available for as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹²¹ Tetra Tech, Inc. *LS Wetland Determination Report*. This report is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹²² SFRPD. *Single Parameter Wetland Delineation Report*. This document is available for as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹²³ SFRPD. *Biological Assessment*. This Biological Assessment was amended on August 16, 2012. These documents are available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹²⁴ USFWS. *Biological Opinion*. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹²⁵ The proposed project is part of the project for which the Biological Opinion was issued by the USFWS. The proposed project, except for the construction of a 1,600-sf pond, is outlined under "Construction Action" on pages 5 and 6 of the Biological Opinion. The proposed construction of a 1,600-sf pond is outlined under "Conservation Measures for Golf Course Maintenance and Operations" on page 19 of the Biological Opinion.

¹²⁶ The Biological Opinion issued by the USFWS included the proposed project, as well as the ongoing operations and maintenance of the golf course. Although ongoing golf course operations and maintenance activities, such as pump

Opinion concluded that the proposed project would not be likely to jeopardize the continued existence of the CRLF or SFGS based on the Conservation Measures to be implemented as part of the project. These Conservation Measures are intended to minimize the likelihood or potential for take of individual CRLF and SFGS.

An Incidental Take Statement is also included in the Biological Opinion.¹²⁷ The Incidental Take Statement provides the maximum amount of incidental take of CRLF and SFGS anticipated for the proposed project, effects of the take, and terms and conditions related to the Incidental Take Statement. The proposed project is subject to these Terms and Conditions. According to the Incidental Take Statement, the USFWS anticipates, even with implementation of the Conservation Measures as outlined on pages 11 through 13 of the Biological Opinion, that:

- 1) All CRLF in the 0.624-acre area¹²⁸ within the HSP construction site will be subject to incidental take in the form of harassment and capture;
- 2) In total one CRLF adult will be subject to incidental take in the form of death or injury as a result of construction activities;¹²⁹
- 3) All SFGS in the 0.624-acre construction area will potentially be harassed as a result of ground disturbing activities, and take of this species is expected to be in the form of harassment and no SFGS is expected to be killed or injured as a result of construction activities; and
- 4) All SFGS and CRLF in the restoration¹³⁰ area footprint will be subject to incidental take in the form of harassment as a result of the direct effects of removal of plants, revegetation activities, and other activities associated with pond construction.

Impact BIO-1: The proposed project would not conflict with an adopted habitat conservation plan or natural community plan. (Less than Significant)

The only adopted conservation or management plan applicable to Sharp Park is the 1995 SNRAMP. The proposed 2006 SNRAMP is currently under environmental review and has not yet been adopted. As discussed in Section C, Compatibility with Existing Zoning and Plans, the project would not conflict with the 1995 or the proposed 2006 SNRAMP. Therefore, this impact is less than significant.

management and operation, mowing, and golf cart use, are discussed in the Biological Opinion, these ongoing operations and maintenance activities are not considered part of the proposed project for purposes of this CEQA analysis, but rather are considered part of the existing, or baseline, conditions.

¹²⁷ "Incidental Take" is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the FESA provided that such taking is in compliance with the Incidental Take Statement.

¹²⁸ The 0.624-acre area includes the areas where the "Construction Activities" would take place. "Construction Activities" in the Biological Opinion include all of the elements of the proposed improvements to the pumphouse (construction of steps and a maintenance walkway and replacement of the existing wooden retaining wall), removal of sediment and emergent vegetation in HSP and the connecting channel, and realignment of the existing golf cart paths.

¹²⁹ "Construction Activities" in the Biological Opinion include all of the elements of the proposed improvements to the pumphouse (construction of steps and a maintenance walkway and replacement of the existing wooden retaining wall), removal of sediment and emergent vegetation in HSP and the connecting channel, realignment of the existing golf cart paths.

¹³⁰ "Restoration" includes the proposed creation of a perennial pond per Conservation Measure 32 of the Biological Opinion and the restoration of one half acre of upland habitat per Conservation Measure 29 of the Biological Opinion. See page 37 of the Biological Opinion for more information. A Categorical Exemption (Planning Case No. 2013.1008E) was issued on August 5, 2013 concerning the restoration of one half acre of upland habitat.

Impact BIO-2: The proposed project could have a substantial adverse effect, either directly or through habitat modifications, on special-status species. (Less than Significant with Mitigation)

The proposed project includes improvements to existing facilities and enhancement and creation of habitat for CRLF and SFGS. The project's potential impacts to each of the special-status species that are known or have the potential to occur at the project site are addressed below.

California Red-legged Frog and San Francisco Garter Snake

Potential effects of the proposed project to CRLF and SFGS are addressed in the Biological Opinion prepared by the USFWS.¹³¹ The jeopardy analysis in the Biological Opinion relies on four components: 1) the status of the species, which evaluates CRLF's and SFGS's range-wide conditions, the factors responsible for that condition, and their survival and recovery needs; 2) the environmental baseline, which evaluates the condition of these species in the action area, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of these species; 3) the effects and action, which determines the direct and indirect effects of the proposed federal action and the effects of any interrelated or interdependent activities on these species; and 4) cumulative effects, which evaluate the effects of future, non-federal activities in the action area on them.

The Biological Opinion noted that because CRLF and SFGS have been observed throughout the project site, the effects of the construction activities to wetland and upland habitat and to individual CRLF and SFGS will be throughout the 0.624-acre construction footprint. Injury, exposure disorientation and disruption of normal behaviors will likely result from: 1) excavation of sediments and vegetation as part of the golf cart path realignments; 2) the removal and/or disturbance of vegetation, sediments, and cover sites including animal burrows, boulders of rocks, organic debris such as downed trees or logs in HSP and the connecting channel; 3) construction of a maintenance walkway around the pumphouse at HSP; and 4) soil disturbance and fill associated with replacement of the wooden retaining wall with a concrete retaining wall at HSP. Construction noise, vibration, and increased human activity during the 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 CRLF and SFGS by causing them to leave the work area. This disturbance may increase the potential for predation and desiccation.

The Biological Opinion further states that, as demonstrated at Mori Point, the proposed creation of a pond can benefit CRLF and SFGS and that the proposed removal of emergent vegetation (cattails and bulrush) would improve breeding habitat for CRLF. Although ultimately serving as a long-term conservation measure for CRLF and SFGS, these activities may also result in adverse effects to both species during construction. Short-term direct and indirect adverse effects to CRLF and SFGS are likely to be minimized, provided that the SFRPD constructs the pond following the scope and design of the existing GGNRA ponds at Mori Point.

The Biological Opinion concluded that the proposed project would not be likely to jeopardize the continued existence of the CRLF or SFGS with implementation of conservation measures

¹³¹ USFWS. *Biological Opinion*, Pages 30 through 32, 37, and 38. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

included in the Biological Opinion. These conservation measures, along with the applicable Terms and Conditions included in the Incidental Take Statement, would minimize the likelihood of potential for take of individual CRLF and SFGS and are included in **Mitigation Measure M-BIO-2a**, as outlined below.¹³²

The proposed project would also be subject to the Terms and Conditions related to the Incidental Take Statement issued by the USFWS for this project. To be exempt from the prohibitions of Section 9 of the FESA, the USACE and the SFRPD shall ensure compliance with these Terms and Conditions. The Terms and Conditions include measures intended to minimize the impact of incidental take on CRLF and SFGS.

The measures included in the Terms and Conditions in the Biological Opinion that are applicable to the proposed project are incorporated in **Mitigation Measure M-BIO-2a**, as outlined below.

Mitigation Measure M-BIO-2a - Protection of CRLF, SFGS, and WPT

1. All sensitive habitats outside the construction site shall be avoided during and following project implementation. All biologists working on the project and their roles shall be approved by the USFWS and CDFW¹³³ based on their qualifications. All approved biologists shall be part of the Project Implementation Team. The SFRPD shall designate one of the USFWS/CDFW-approved biologists to oversee and coordinate all avoidance and survey tasks of the Project Implementation Team. Prior to the commencement of any project-related construction activity, an approved biological monitor shall flag the sensitive areas and/or the limits of the construction site with suitable markers that are easily discernible by construction equipment operators. No construction equipment or personnel shall enter the sensitive areas designated for avoidance by the project;
2. The lead USFWS/CDFW-approved biological monitor shall be present at all planning meetings prior to project implementation. A USFWS/CDFW-approved biological monitor shall present an educational program at one or more such meetings regarding the listed species and their habitats. Every person who works on project implementation shall receive this education program and sign a form indicating they have attended and agree to abide by the terms and conditions being implemented to avoid take of listed species and/or habitat. A USFWS/CDFW-approved biological monitor shall be present at the site during all construction activities including, but not limited to, vegetation and sediment removal, placement of concrete support structures for the walkway, replacement of the retaining wall and pathway repair. The biological monitor shall have the authority to stop work temporarily in order to protect the listed species or the flagged sensitive areas;
3. Prior to commencement of any construction activities and daily prior to construction each day, a USFWS/CDFW-approved biological monitor shall survey the site for listed species. A USFWS/CDFW-approved biologist shall also oversee the installation of exclusion fencing in segments or fully enclosing components of the construction site as appropriate. The biological monitor shall inspect the integrity of the exclusion fencing on a daily basis;
4. During the proposed sediment and vegetation removal activities, if required, up to three biological monitors shall be present to: 1) monitor the area of vegetation or sediment

¹³² The conservation measures in the Biological Opinion have been modified to include measures to protect WPT and included in Mitigation Measure M-BIO-2a.

¹³³ Formally known as CDFG

- removal; 2) observe the material as it is transferred to the shoreline; and 3) inspect material as it is loaded into a container/dump bed that will allow the water in the excavated sediment to drain out before removal from the site;
5. Biological monitors shall complete a daily monitoring log that records information on compliance and construction activities as well as avoidance measures implemented each day during the project. Each monitor shall submit a daily monitoring report from to the lead biologist before the start of the next construction day. Photographic documentation of project activities shall accompany each daily monitoring log. Within 60 days of completion of the project, the SFRPD shall submit a report to the USFWS and CDFW documenting compliance with the terms and conditions and avoidance of unauthorized take of species or habitat;
 6. No earthmoving or soil disturbing work shall occur starting October 31 and ending June 1, the breeding season for CRLF and the season when SFGS are less active on the site;
 7. Terrestrial vegetation in undisturbed areas around HSP and the connecting channel shall be cleared by manual means to a height of four inches (or a height that allows visibility of the ground) under the supervision of an approved biological monitor and checked for the presence of CRLF, SFGS, and WPT;
 8. Prior to ground disturbing activities associated with construction, including the use of staging or vehicle access areas or the removal or placement of fill or construction materials, rodent burrows in the construction site shall be hand excavated by a USFWS/CDFW-approved biologist until the burrow terminates or until a maximum depth of 30 centimeters;
 9. Vehicle speeds in the project area shall not exceed 10 miles an hour. The USFWS/CDFW-approved biological monitor shall inspect for CRLF, SFGS, and WPT underneath any vehicle that is parked for 30 minutes or more prior to moving the vehicle. All construction personnel shall inspect under their tires and vehicle if it is in idle for more than five minutes and has not been inspected by the on-site monitor. Vehicles accessing the construction site shall be limited to the minimum necessary to complete the project. Project personnel shall park personal vehicles at a staging area located away from all aquatic habitats or areas of sensitive upland habitat;
 10. Any workers on the site that observe any frog, snake, or turtle shall immediately report their findings to the on-site biological monitor and immediately suspend work that may be harmful to the individual. The monitor shall identify the animal if it has not left the area. If a CRLF, SFGS, or WPT is observed in the work area, it shall be relocated by a USFWS/CDFW-approved biological monitor to the nearest suitable aquatic habitat out of harm's way. Work may only recommence if CRLF, SFGS, and WPT move out of harm's way or the animal is relocated by the biological monitor. Work may not recommence until the biological monitor has returned to the work area and gives approval;
 11. Only USFWS/CDFW-approved personnel shall be allowed to capture or attempt to capture and move CRLF, SFGS, WPT, or other non-listed wildlife (e.g., treefrogs, small rodents) in the work area;
 12. Erosion control best management practices (silt fences, coir rolls, straw bales) shall be employed as part of the dewatering of sediments after removal and while soils are exposed. The erosion control measures shall not include netting, plastic or natural monofilament netting or other materials that may entrap CRLF, SFGS, or WPT;

13. After completion of the project, the access routes in the wetland shall be revegetated with appropriate native plants and erosion control measures, as described in Measure 12, as outlined above, shall be installed on exposed soils with slopes of 3:1 or greater;
14. All construction activities shall occur in uplands and on the golf course. Stockpiling and staging areas shall be located in the uplands and in areas cleared for species and the golf course. Construction materials (bricks, boards, shoring, concrete forms, etc.) shall be elevated approximately four to six inches above ground to minimize the potential for species to take cover under these items. If feasible, materials shall be staged on a trailer/truck bed to avoid contact with the ground. Construction materials shall be brought to on-site staging areas as close to the time they are needed as possible;
15. The SFRPD shall minimize the potential for harm, harassment, injury, and death of federally listed wildlife species resulting from project-related activities including implementation of the Conservation Measures in the Biological Opinion;
16. If requested, during or upon completion of construction activities, the SFRPD shall ensure the USFWS, CDFW, or their authorized agents have immediate access to the project area. The on-site biologist and/or a representative from the USACE/SFRPD shall accompany USFWS personnel on an on-site inspection of the project area(s) to review project effects to CRLF and SFGS and their habitat;
17. The SFRPD shall ensure compliance with the Reporting Requirements of the Biological Opinion;
18. During the course of construction activities, biological monitors may determine that relocation of a CRLF or SFGS is necessary for the safety of individual animals. If it is determined that a SFGS needs to be moved, the USFWS shall be contacted for further guidance. Individuals shall be relocated to appropriate sites away from disturbance on Sharp Park property;
19. Within nine months of issuance of the Biological Opinion, the SFRPD shall develop, for the USFWS review and approval, a monitoring plan for the new perennial pond. The plan shall include monitoring of: 1) the use of the pond by all life stages of CRLF and SFGS, 2) the amount of emergent vegetation and open water available, and 3) how effective barriers are at preventing entry by people and off-leash dogs. If predators become established in the pond they shall be immediately removed and the USFWS shall be notified; and
20. Implementation of the pond monitoring plan shall begin immediately following the construction of the new pond.

In response to the Neighborhood Notice circulated on January 15, 2013, some of the commenters raised concerns related to impacts to CRLF and SFGS and their habitat resulting from acid sulfate soils being disturbed in the water during the proposed removal of sediment and emergent vegetation in HSP and the connecting channel and culverts that link HSP and LS. During implementation of sediment and vegetation removal work, sediment present at the bottom of the water would be disturbed, resulting in a temporary suspension of sediment in the water column. Although unlikely, these sediments may contain sulfides and other components which, once disturbed or suspended in the water column, could have adverse impacts to special-status species, their habitat, or water quality. When exposed to dissolved or atmospheric oxygen, sulfides transform to sulfuric acid, which in turn results in the formation of acid sulfate soils. An increase in the amount of exposed acid sulfate soils in water bodies generally causes a decrease of

the pH of water (an increase in acidity of the water) and a decrease in the amount of dissolved oxygen in the water, causing anoxic conditions¹³⁴ in which resuspension of anoxic hydrogen sulfide sediments may result in pulses of low oxygen conditions in HSP. This could cause mortality of CRLF larvae and juveniles.¹³⁵

The Biological Opinion¹³⁶ issued by the USFWS concluded that the proposed project would not jeopardize the continued existence of the CRLF or SFGS with the implementation of the Conservation Measures included in the Biological Opinion, which limit the construction to June 1 through October 31 and 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. The Biological Opinion concluded that the Conservation Measures, which limit the construction period to June 1 through October 31, would minimize the likelihood that adult or juvenile CRLF would be present and would reduce potential adverse effects on CRLF.

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. Since materials excavated at the LS wetlands complex would not be re-used as part of the project, hypoxic conditions would not result from re-use of dried sediments as part of the proposed project. Specific case studies of instances where acid sulfate soils effects have occurred in Bay Area restoration sites have not been identified.¹³⁷

Removal of sediment in the connecting channel between HSP and LS, similar to the proposed sediment removal, was reported to have occurred more than 10 years ago. At that time, no effects that would normally be associated with acid sulfate soils, including acidification of waters and sediment surfaces, were identified. At the time of the previous removal, it was reported that the bottom of HSP was lined with gravel. The previous sediment removal activity removed sediments that had accumulated after the seawall, which eliminated saline water input into the wetland complex, 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 excavated sediments. The construction of the seawall eliminated saline water input into the wetland complex. 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

¹³⁴ "Anoxic condition" means a condition in which hydrogen ion availability increases and binds with sulfides mobilized from sediments.

¹³⁵ 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"). This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹³⁶ USFWS. *Biological Opinion*. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹³⁷ Harry Gibbons and Robert Plotnikoff, Tetra Tech, Inc. *Acid Sulfate Soils Technical Memorandum*. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

acid sulfate soils conditions.¹³⁸ This supports the conclusion that the proposed sediment and vegetation removal would not likely result in substantial disturbance of acid sulfate soils in the water column, which may in turn result in a significant impact to special-status species.

Environmental effects that may 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.¹³⁹ 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) to special-status species or water quality. 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-BIO-2b** as outlined below would be implemented by the SFRPD during construction to reduce the potential for adverse impacts to special-status species as a result of acid sulfate soils and other components. **Mitigation Measure M-BIO-2b** requires that sediment core sampling tests be conducted and specific remediation measures be implemented by the SFRPD if results of the sediment core sampling tests reveal the need for such remediation measures prior to commencement of any on-site work related to the removal of sediment and emergent vegetation in HSP or the connecting channel and culverts that link HSP and LS. **Mitigation Measure M-BIO-2b** requires that a toxics pathway analysis be conducted for potential risks and toxicities to species that may be affected by localized increases in acidity, hypoxia, or dissolved metals concentration should the potential for acid sulfate soils and anoxic conditions be present. This method for analyzing potential for bioaccumulation of toxics in the environment is a recommended approach for determining risk to wildlife and plants.¹⁴⁰ Pathway analysis is used to determine environmental conditions that would mobilize toxics and increase exposure that could have chronic or acute effects.

Mitigation Measure M-BIO-2b - Protection of Special-Status Species and Water Quality from Acid Sulfate Soils and Other Components

Prior to commencement of any on-site work related to the proposed removal of sediment and emergent vegetation in HSP or the connecting channel and culverts that link HSP and LS, sediment core sampling tests shall be conducted in the manner specified in this mitigation measure.

The result of the sediment core sampling tests and remediation measures recommended by a qualified SFRPD biological/hydrological consultant, if any, shall be submitted to the USFWS and CDFW for review and approval prior to commencement of any on-site remediation work or sediment/vegetation removal work at HSP or the connecting channel and culverts. If the USFWS or CDFW determines, based on the results of the sediment core sampling tests, that remediation measures are required, the SFRPD shall submit a remediation and monitoring plan to all applicable resource agencies for review and approval prior to implementation of the remediation measures. Copies of all correspondence with the resource agencies shall be submitted to the ERO for review. The sediment core sampling tests shall include the following elements:

¹³⁸ Harry Gibbons and Robert Plotnikoff, Tetra Tech, Inc. *Acid Sulfate Soils Technical Memorandum*. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹³⁹ Ibid.

¹⁴⁰ USEPA. *Framework for Metals Risk Assessment*, EPA 120/R-07/001, March 2007. Available online at: <http://www.epa.gov/raf/metalsframework/pdfs/metals-risk-assessment-final.pdf>. Accessed July 17, 2013.

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 and comment prior to commencement of any on-site work related to the sampling tests. The Work Plan shall describe, at a minimum, compliance with Items 2 through 6 of this mitigation measure. Copies of all correspondence with the resource agencies shall be submitted to the ERO for review.

2. Sampling of Sediment Cores

The sampling test shall include collection of, at minimum, one sediment core from HSP, two from the connecting channel, and one from LS. The exact locations of sampling shall be determined pursuant to the work plan developed in accordance with Item 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 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 newly restored HSP and connecting channel.

Sediment cores shall be analyzed based on Toxicity Reference Values (TRVs) from the USEPA and Screening Quick Reference Tables (SQuiRT) from the NOAA.¹⁴¹ 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 analysis¹⁴² to determine the

¹⁴¹ The National Oceanic and Atmospheric Administration (NOAA), Office of Response and Restoration. *SQuiRT Cards*. Available online at: <http://response.restoration.noaa.gov/cpr/sediment/squirt/squirt.html>. Accessed July 17, 2013.

¹⁴² A toxics pathway analysis identifies potential risks and toxicities to species that may be affected by localized increases in acidity, hypoxia, or dissolved metals concentration.

appropriate remediation measures. The analysis results and determination shall be submitted to the USFWS, CDFW, and ERO for review.

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 by the USFWS, CDFW, and ERO based on the results of Items 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 resource agencies for review and approval. Copies of all correspondence with the resource agencies shall be submitted to the ERO for review.

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, as approved by the USFWS and CDFW.

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.

6. Monitoring

During sediment and vegetation removal in HSP and the connecting channel and culverts, 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.¹⁴³

To facilitate the proposed sediment and emergent vegetation removal and to reduce potential impacts to CRLF, the water level of HSP and the connecting channel may be lowered through the use of the existing pumps in consultation with the USFWS and CDFW. If water levels in HSP or LS fall below sea level and beach groundwater levels, then saline groundwater may flow into the lagoon from the beach.¹⁴⁴ CRLF cannot breed when salinity levels exceed approximately four parts per thousand (ppt).¹⁴⁵ Although salinity levels may increase in HSP, the construction period would be short and would not correspond to the breeding season of CRLF. 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 CRLF associated with increased salinity levels would be temporary and would occur outside the breeding season for CRLF, and would not be considered significant.

Although construction activities could result in temporary impacts to CRLF and SFGS that are considered significant as discussed above, implementation of **Mitigation Measures M-BIO-2a** and **M-BIO-2b** would reduce the project's impacts to CRLF and SFGS to a less-than-significant level.

Western Pond Turtle

Impacts to WPT from the proposed project would be similar to those described above for CRLF. However, because the restoration activities would occur during the WPT nesting season, the magnitude of those impacts would be potentially greater for this species. Temporary impacts from construction activities would result in the disturbance of feeding, breeding, aestivation sites and dispersal behaviors. The removal of nonnative vegetation may disturb western pond turtles sheltering within the plants as well as remove basking sites along the wetland banks. Increased sedimentation could adversely affect shallow water habitat for hatchlings as well as basking sites along the banks. These effects of the proposed project would result in significant impacts to WPT.

Implementation of **Mitigation Measures M-BIO-2a** and **M-BIO-2b**, as outlined above, would reduce short-term impacts to WPT resulting from the proposed project to a less-than-significant level.

San Francisco Dusky-footed Woodrat

The San Francisco dusky-footed woodrat, which inhabits forests with moderate canopy and moderate to dense understory, is known to occur in the Upper Canyon at Sharp Park. As part of

¹⁴³ 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).

¹⁴⁴ USFWS. *Biological Opinion*. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹⁴⁵ Swaim Biological Incorporated. *Sharp Park Wildlife Surveys*. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

the proposed project, the sediment and vegetation removed from HSP and the connecting channel would be transported by trucks to a remediated former rifle range site on the east side of PCH. Habitat for the San Francisco dusky-footed woodrat occurs in the non-native forest and riparian areas surrounding the former rifle range site. Although habitat exists in the surrounding area, disposal of the sediment and vegetation would occur in the non-native grassland area, which is located well away from the San Francisco dusky-footed woodrat habitat. Therefore, there would be no impact to this species or its habitat. While additional truck trips would occur in the area, potentially resulting in greater noise, the area currently receives intermittent vehicular traffic and the level of additional noise and disturbance along with the distance between the disposal site and habitat for the San Francisco dusky-footed woodrat would not result in a significant impact on this species. Therefore, the proposed project would result in less-than-significant impacts to the San Francisco dusky-footed woodrat.

Salt Marsh Common Yellowthroat and Black-Crowned Night Heron

Construction activities associated with the proposed project could also result in the temporary disturbance to the salt marsh common yellowthroat from an increase in noise, vehicle traffic, and human presence. The salt marsh common yellowthroat uses saltwater or freshwater marsh habitat with dense vegetation for nesting, cover, and foraging. The proposed project may result in temporary impacts to this species through the disturbance and loss of nesting habitat from sediment and emergent vegetation removal activities. These impacts would be considered a significant impact. Similar temporary impacts to the black-crowned night heron could occur as a result of the proposed project. Implementing **Mitigation Measure M-BIO-2c** as outlined below, requires that all vegetation removal activities be conducted outside the breeding season for bird species (February 1 through August 31, as designated by the CDFW), unless a breeding bird survey is conducted prior to vegetation removal activities and determines that no nesting birds are 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 construction activities.

In addition, there would be permanent loss of some nesting habitat as vegetated areas are converted to open water. However, the overall area of freshwater marsh habitat that would be removed represents approximately one percent¹⁴⁶ of the total habitat present in the LS wetland complex for these bird species. Furthermore, the freshwater marsh would likely re-establish through natural succession over time. Because the impact area represents a small portion of the total habitat in the LS wetland complex and ample habitat would remain in adjacent areas at Sharp Park, the proposed project would not result in a significant permanent impact to nesting and other habitat of the salt marsh common yellowthroat or black-crowned night heron.

With implementation of **Mitigation Measure M-BIO-2c**, the proposed project would result in less-than-significant impacts to the salt marsh common yellowthroat and black-crowned night heron.

Mitigation Measure M-BIO-2c - Protection of Bird Species

Vegetation removal activities shall be conducted outside the breeding season (February 1 to August 31), unless the following specific conditions are met: a breeding bird survey by a

¹⁴⁶ Based on the wetland delineation report prepared by Tetra Tech in November 2008, a total of approximately 19.56 acres (approximately 852,033 sf) of freshwater marsh were delineated in the LS wetland complex. Based on the wetland delineation report prepared by the SFRPD in May 2013, a total of approximately 8,612 sf of freshwater marsh would be permanently impacted by the proposed project. Therefore, the proposed project would permanently impact approximately one percent of the total freshwater marsh present in the LS wetland complex.

qualified biologist has been conducted prior to any vegetation removal activities. 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 nesting birds from being disturbed by power tools or other equipment. Weeds may be pulled by hand no closer than 50 feet from the nest.

Locally Significant Bird Species

As discussed above, a number of bird species, considered Species of Local Concern by the Golden Gate Audubon Society, breed or occur at Sharp Park. These bird species include: American goldfinch; American kestrel; band-tailed pigeon; black-crowned night heron; clark's grebe; gadwall; great horned owl; hairy woodpecker; hutton's vireo; pacific-slope flycatcher; pied-billed grebe; purple finch; red-shouldered hawk; red-tailed hawk; say's phoebe; steller's jay; swainson's thrush; tree swallow; and violet-green swallow. Some of these species primarily inhabit forests or woodlands. Nonetheless, all of these species or their nests could potentially be present in the project area.

Locally significant bird species including those listed above may occur in the project area or their habitat may be affected by the proposed project as a result of vegetation removal and an increase in noise, vehicle traffic, and human presence during construction activities. Impacts to locally significant bird species would be similar to those described above for the salt marsh common yellowthroat and black-crowned night heron. If nesting of locally significant bird species is present, in compliance with the MBTA, the SFRPD would be required to avoid damaging or removing the nests of any migratory bird species. Implementation of **Mitigation Measure M-BIO-2c** as outlined above, and compliance with the MBTA, would reduce the project's impacts on such bird species to a less-than-significant level.

Impact BIO-3: The project could interfere with the movement of native resident or migratory wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. (Less than Significant with Mitigation)

Migratory Corridors and Nursery Sites

Sharp Park is bordered in part by undeveloped areas, including Sweeney Ridge, Mori Point, and Milagra Ridge, which allows it to serve as a relatively undisturbed corridor for wildlife, particularly birds. No special-status fish are known to occur in LS, HSP, or the connecting channel. Many migratory birds use some areas of Sharp Park for foraging, nesting, and perching habitat.

The potential impacts on wildlife movement, migratory corridors, and nursery sites as a result of the proposed project would include the temporary disturbance from human presence as well as the disturbance of foraging and nesting habitat from vegetation removal and construction of the proposed pond. These activities may result in localized and temporary impacts to wildlife movement due to equipment and human presence and the amount of disturbance from earthmoving activities and removal of sediment and vegetation, which could be considered a significant impact. However, the proposed project would ultimately result in long-term beneficial impacts on wildlife movement by improving habitat quality for native species and allowing for greater habitat connectivity between Sharp Park and contiguous areas.

Implementation of **Mitigation Measures M-BIO-2a, M-BIO-2b, and M-BIO-2c** as outlined above and **M-BIO-4a** and **M-BIO-4b** as outlined below would minimize the potential temporary impacts to wildlife movement within the LS wetland complex by implementing protection measures to avoid and minimize impacts to special-status species as well as wetland and riparian

areas. These measures require pre-construction surveys, worker education programs, biological monitoring, exclusion fencing, and consultation with the USFWS and CDFW. With implementation of **Mitigation Measures M-BIO-2a, M-BIO-2b, M-BIO-2c, M-BIO-4a, and M-BIO-4b**, the project's impacts on fish and wildlife movement, migratory corridors, and nursery sites would be less than significant.

Impact BIO-4: The proposed project would not have a substantial adverse effect on sensitive natural communities. (Less than Significant with Mitigation)

The sensitive natural communities present within the project site include coastal scrub, non-native grasslands, and wetland habitats.¹⁴⁷

Coastal Scrub and Non-native Grasslands

The proposed creation of a perennial pond would convert some of the areas currently characterized as coastal scrub with native and invasive species to open water wetland habitat for CRLF and SFGS. The areas surrounding the perennial pond would be replanted with native coastal scrub vegetation where appropriate. Removal of invasive vegetation is expected to result in an overall benefit to native coastal scrub habitat. As a result, this impact to the coastal scrub community would be less than significant.

No native grasslands would be affected by the proposed project. Sediment and emergent vegetation removed from HSP and the connecting channel would be transported to and spread at the former rifle range site on the east side of PCH. The former rifle range site is characterized by non-native grasslands, and therefore disposal of sediment and vegetation at this site would not affect native grasslands.

Wetlands and Waters of the U.S.

The project would result in a permanent impact to wetland habitat as a result of the construction of a maintenance walkway at the HSP pumphouse and replacement of the retaining wall. The support structures for the proposed maintenance walkway and replaced retaining wall would result in 1.2 CYs and 0.4 CYs, respectively, of permanent fill in wetlands and waters of the U.S.¹⁴⁸

As previously mentioned, a wetland delineation report was prepared in 2008 to delineate the USACE/CCC jurisdictional wetlands¹⁴⁹ in the LS wetland complex. In addition, the May 2013 wetland delineation report evaluates the proposed project's impacts to CCC-only wetlands located in the proposed project area as part of the requirements for the Coastal Development Permit required by the CCC for this project (see Figure 7).¹⁵⁰ Elements of the proposed project that may affect either the USACE/CCC jurisdictional wetlands and/or waters of the U.S. include:¹⁵¹

- Removal of sediment and emergent vegetation (cattails and bulrush) within HSP and the connecting channel that links HSP and LS;
- Construction of a maintenance walkway; and

¹⁴⁷ Tetra Tech, Inc. *LS Wetland Determination Report*. This report is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹⁴⁸ USFWS. *Biological Opinion*. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹⁴⁹ See pages 59 and 60 of this Initial Study for the definitions of USACE/CCC jurisdictional wetlands.

¹⁵⁰ SFRPD. *Single Parameter Wetland Delineation Report*. This document is available for as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹⁵¹ Ibid.

- Replacement of a wooden retaining wall with a concrete retaining wall at the pumphouse.

The May 2013 wetland delineation report concluded that no wetlands would be affected by the proposed construction of steps at the HSP pumphouse, construction of a 1,600-sf perennial pond, or realignment of a segment of the golf cart path segment.¹⁵² The area of each type of wetland or waters of the U.S. that would be permanently affected and created as part of the proposed project, and the area of each type of wetland that would be temporarily affected by the proposed project are shown in Tables 6 and 7, respectively, and discussed below.

The May 2013 wetland delineation report found that a total of 8,612 sf of freshwater marsh (USACE/CCA jurisdictional wetlands) would be permanently affected by the proposed sediment and emergent vegetation removal in HSP and the connecting channel, construction of a maintenance walkway at the pumphouse, and replacement of a retaining wall at the pumphouse. Of the 8,612 sf of affected freshwater marsh, 8,600 sf would be converted to open water wetlands as part of this project and 12 sf represents a permanent loss of wetlands that would result from the construction of the footings for the proposed walkway and replacement of the existing retaining wall at the pumphouse.

The proposed emergent vegetation (cattails and bulrush) removal would result in conversion of a portion of the existing vegetated wetland to open water habitat, consistent with historical conditions of the wetland complex which previously provided productive CRLF and SFGS habitat. Over the years, cattails and bulrush 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 CRLF. Removing accumulated sediment 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 proposed conversion of wetland to open water habitat would not result in a loss of waters of the U.S., and would be consistent with the historical conditions of wetland complex.

The proposed project includes construction of a new 1,600-sf perennial pond and would result in 8,600 sf of open water habitat in HSP. This means that a total of 10,200 sf of wetlands and/or waters of the U.S. would be created as part of this project. Therefore, the proposed project would result in a net increase of 1,588 sf of wetlands and/or waters of the U.S. within the project site, and would not result in a significant permanent impact to wetlands.

The proposed project would also temporarily affect a total of 3,700 sf of USACE/CCA jurisdictional wetlands and/or waters of the U.S. The 3,700 sf includes 3,000 sf of open water habitat, which would remain as open water habitat upon the completion of the proposed sediment and emergent vegetation removal in HSP, and 700 sf of freshwater marsh, which would be affected by the access areas required for the sediment and emergent removal activities in HSP. Most of these areas temporarily affected during construction would be protected by all applicable BMPs during construction and revegetated with native plant species upon the project completion. Nevertheless, these temporary impacts to wetlands could be considered significant. Implementation of **Mitigation Measures M-BIO-4a** and **M-BIO-4b**, as outlined below, would ensure that these temporary impacts would be reduced to a less-than-significant level.

¹⁵² The May 2013 wetland delineation report included realignment of two golf cart path segments. The project has since been modified to realign only one golf cart path segment (north segment) and maintain the other golf cart path segment (south segment) at its current location. The May 2013 wetland delineation report identified that no wetlands would be affected by the proposed alignment of the north golf cart path segment.

As discussed in Impact BIO-2, temporary impacts to wetlands resulting from the proposed sediment and emergent vegetation removal in HSP and the connecting channel could include impacts due to the potential presence of acid sulfate soils or other components in HSP and the connecting channel or anoxic conditions potentially caused by the sediment removal activities. Implementation of **Mitigation Measure M-BIO-2b** would reduce these temporary impacts to a less-than-significant level.

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Sharp Park, Pacifica, CA
Figure 2: Elements related to construction

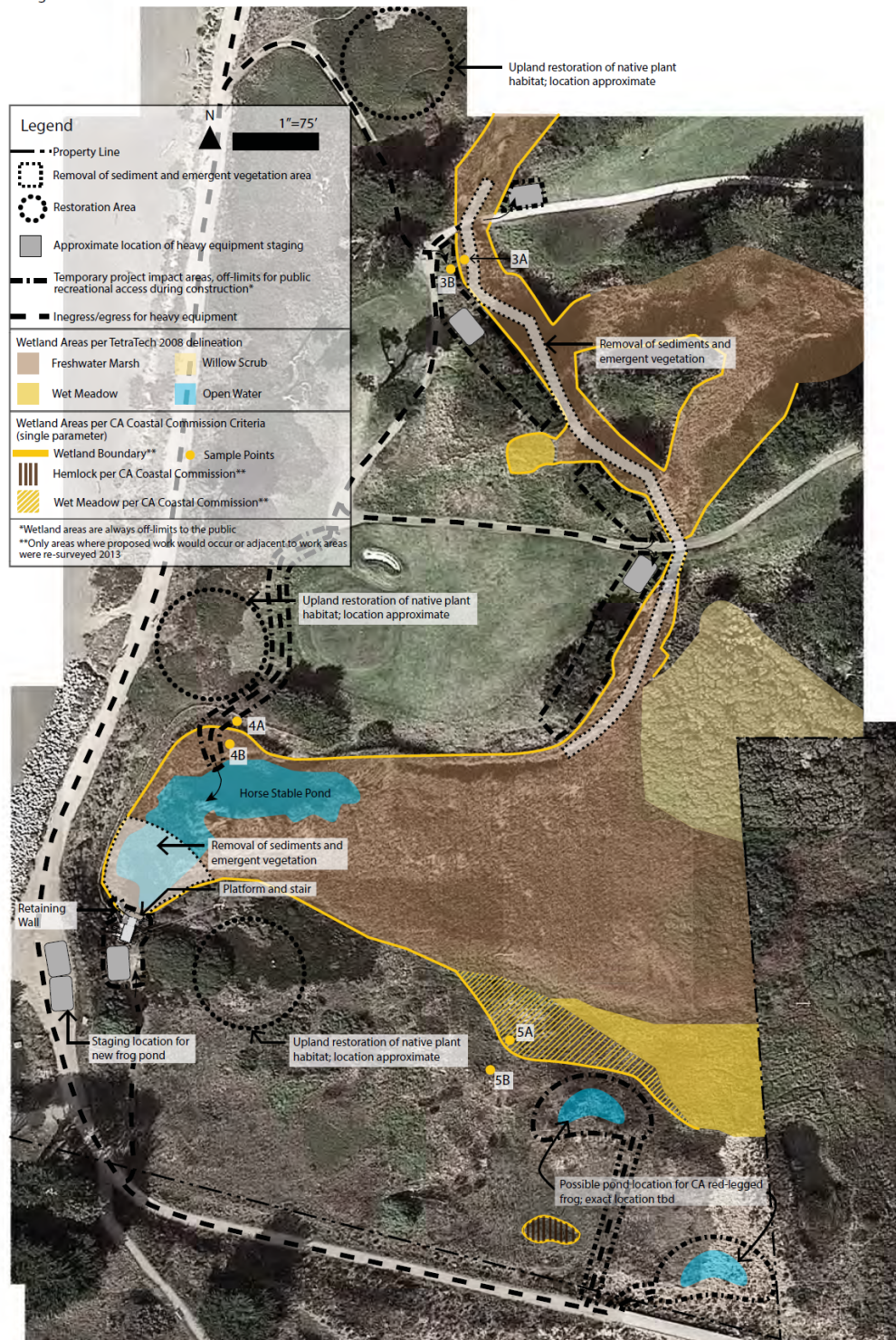


Figure 7. Affected Wetlands and Waters of the U.S. near HSP¹⁵³

Source: San Francisco Recreation and Park Department

¹⁵³ SFRPD. *Single Parameter Wetland Delineation Report*. This document is available for as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

Table 6. Permanently Affected Wetlands and Waters of the U.S.¹⁵⁴

Affected Area - Permanent		Created (Post Construction) - Permanent	
Habitat Type	Area (square feet)	Habitat Type	Area (square feet)
Freshwater marsh	8,612	Open water	8,600
Total	8,612	Freshwater marsh / Open Water (new pond)	1,600
		Total	10,200
		Net Increase	1,588

Table 7. Temporarily Affected Wetlands and Waters of the U.S.¹⁵⁵

Affected Area - Temporary	
Habitat Type	Area (square feet)
Freshwater marsh	700
Open water	3,000
Total	3,700

¹⁵⁴ SFRPD. *Single Parameter Wetland Delineation Report*. This document is available as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹⁵⁵ Ibid.

As discussed above, implementation of the project would result in temporary impacts to wetlands, which could be considered a significant impact. Implementation of **Mitigation Measures M-BIO-2b, M-BIO-4a, and M-BIO-4b** as outlined below would reduce these temporary impacts to a less-than-significant level. Prior to implementing the proposed project, the SFRPD would be required to obtain a Section 404 permit from the USACE, a Section 401 water quality certification from SFBWQCB, a coastal development permit from the CCC, and a lake or streambed alteration agreement from the CDFW. These resource agencies may require measures to protect wetlands in addition to **Mitigation Measures M-BIO-4a and M-BIO-4b**.

Mitigation Measure M-BIO-4a - Protection of Wetlands and Natural Habitat

The SFRPD shall obtain all applicable permits from the SFBWQCB, CCC, USACE, and CDFW to protect wetlands and natural habitat. Measures identified in these permits shall be applied, in addition to the following measures, unless otherwise specified by resource agencies:

1. In areas where work is not directly taking place, a minimum 100-foot buffer surrounding all wetlands, ponds, streams, drainages, and other aquatic habitats located on or within 100 feet of the project site shall be clearly designated on the final project construction plans and marked on the site with wildlife-friendly orange construction fencing or silt fencing. If the area is on a slope, silt fencing or other comparable management measures will be installed to prevent polluted runoff, as well as equipment, from entering the buffer area. Signs shall be installed every 100 feet on or adjacent to the buffer fence that read, "Environmentally Sensitive Area – Keep Out." Fencing and management measures shall be installed and inspected prior to project implementation and maintained throughout the restoration period. No equipment mobilization, grading, clearing, storage of equipment or machinery, vehicle or equipment washing, or similar activity, may occur until a representative of the SFRPD has inspected and approved the fencing and/or management measures installed around these features;
2. Vehicle and equipment operators shall use existing access roads and shall remain outside of wetlands and riparian areas that are not directly associated with the proposed project. Project construction and staging areas shall be delineated with construction fencing and shall avoid wetland habitat to the maximum extent feasible; and
3. All vehicles shall be brought in clean and free of weeds to prevent the spread or introduction of invasive plant species. Vehicles and equipment shall be fueled, maintained, and parked at least 100 feet from wetlands. Each morning, operators shall inspect all equipment that requires the use of fuel or fluids for leaks.

Mitigation Measure M-BIO-4b - Wetland Mitigation Plan for Temporarily Affected Areas

Consistent with the requirements for a Section 401 water quality certification permit, the SFRPD shall prepare a wetland mitigation plan for temporarily effected wetlands. Additionally, because the proposed project includes habitat restoration (i.e., construction of a perennial pond), the CCC may require an objective performance evaluation to determine project success which would include a monitoring program and methods for evaluating performance, which could be accomplished through implementation of the wetland mitigation plan. The wetland mitigation plan shall include, at a minimum, a description of the following:

- Proposed project's physical and biological impacts;
- Mitigation goals;

- Mitigation work plan;
- Management and maintenance plan;
- Success criteria and performance indicators;
- Monitoring plan; and
- Site protection measures.

The components of the above mitigation plan may be altered, supplemented, or deleted during the SFBRWQCB's review process, as the SFBRWQCB has final authority over the terms of the water quality certification.

Impact C-BIO: The proposed project, combined with past, present, and reasonably foreseeable future projects in the vicinity, would not make a considerable contribution to any cumulative significant biological resources impacts. (Less than Significant with Mitigation)

The Draft EIR prepared for the proposed 2006 SNRAMP, a reasonably foreseeable future project in the proposed project's vicinity, concluded that the proposed 2006 SNRAMP in combination with the GGNRA Dog Management Plan would result in a significant and unavoidable cumulative impact related to special-status plant and wildlife species. The Draft EIR for the proposed 2006 SNRAMP concluded that with mitigation measures the proposed 2006 SNRAMP would not result in any significant biological impacts.

As discussed above, the proposed project with identified mitigation would not result in any significant biological impacts. Therefore, the proposed project's contribution to cumulative biological resources impacts would be reduced to less than significant with incorporation of **Mitigation Measures M-BIO-2a, M-BIO-2b, M-BIO-2c, M-BIO-4a, and M-BIO-4b.**

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
14. GEOLOGY AND SOILS— Would the project:					
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Change substantially the topography or any unique geologic or physical features of the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 14e would not be applicable because the project does not involve the use of any septic systems.

Impact GE-1: The proposed project would not result in exposure of people and structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, expansive soils, seismic ground-shaking, liquefaction, lateral spreading, or landslides. (No Impact)

The proposed project does not involve the construction of any residences or inhabitable structures. The proposed project would involve construction of minor structures such as steps and a maintenance walkway and replacement of an existing retaining wall near the existing pumphouse at HSP. All of these structures would be constructed in compliance with the California Uniform Building Code. The topography of the project site is relatively flat. The proposed project would not expose people or structures to substantial adverse effects involving the rupture of a known earthquake fault or strong seismic shaking. Ground rupture most commonly occurs along preexisting faults. No known active faults cross Sharp Park, and the project site is not within an Alquist-Priolo Earthquake Hazard Zone. While there is a potential for strong ground shaking at the project site due to a nearby earthquake fault line, the proposed project would not increase the likelihood that people or structures would experience adverse effects from strong ground shaking. Therefore, no impact would result from the proposed project.

Impact GE-2: The proposed project would not result in substantial loss of topsoil or erosion. (Less than Significant)

The proposed project includes minor improvements to existing facilities and the creation of habitat in Sharp Park. Ground disturbance resulting from these construction activities can expose soils to erosion, resulting in a loss of topsoil. However, the magnitude of loss of topsoil or erosion is not expected to be substantial given the minor scope and nature of the proposed project. Therefore, this impact is less than significant. BMPs for erosion control would be implemented for all elements of the proposed project, such as installation of fiber rolls, silt fences, straw blankets, hydroseeding, and straw mulch/wood chips, and these measures would further ensure that the project would not result in a substantial loss of topsoil or erosion.

Impact GE-3: The proposed project would not result in substantial impacts to site topographical features. (Less than Significant)

The proposed project would not substantially change the topography of the project site. Unique geologic features generally include picturesque rock outcrops and some of the last remaining sand dune systems. While the proposed project includes construction of an approximately 1,600-sf pond, this would not be considered a significant change in the topography of the site given the size and depth (approximately 5 feet) of the pond. Therefore, the proposed project would not result in substantial impacts with respect to changes in topographical features at the project site. Therefore, this impact is less than significant.

Impact C-GE: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the site vicinity, would not make a considerable contribution to any cumulative significant impacts related to geology and soils. (Less than Significant)

Geology impacts are generally site-specific and do not have cumulative effects with other projects. There are no known past, present, or future projects that in combination with the proposed project could result in cumulatively significant impacts to geology or soil resources. Thus, the project would not contribute to a cumulative impact on geology or soils.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
15. HYDROLOGY AND WATER QUALITY—					
Would the project:					
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion of siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other authoritative flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Question 15g is not applicable to the proposed project because the project would not involve the construction of any residences or inhabitable structures.

Setting

Climate

The climate in the San Francisco Bay Area is generally characterized as a Mediterranean pattern of cool and mild temperatures along the coast, with higher temperatures inland, cool wet winters, and relatively warm dry summers. Pacifica receives an average of approximately 29.5 inches of precipitation a year, mostly between October and April. Average monthly temperatures range from 50.5 degrees Fahrenheit in January to 62.0 degrees in September.¹⁵⁶

Regional Hydrology

Pacifica is in the San Francisco Bay watershed, U.S. Geological Survey (USGS) hydrologic unit code 18050004. The California State Water Resources Control Board and the nine RWQCBs manage water quality in California and administer federal water pollution control laws. The state board administers water rights and water pollution control, while the RWQCBs conduct planning, permitting, and enforcement. Within this context, Pacifica is in the San Francisco Bay Basin, which is administered by the SFBRWQCB. The SFBRWQCB has developed a water quality control plan (Basin Plan) for the San Francisco Bay region, dividing the basin into several hydrologic planning areas. Most of San Francisco and Pacifica are in the San Mateo Coastal Hydrologic Planning Area.¹⁵⁷

¹⁵⁶ U.S. Climate Data, *Climate, Pacifica, California*. Available online at:

<http://www.usclimatedata.com/climate.php?location=USCA0822>. Accessed July 11, 2013.

¹⁵⁷ SFBRWQCB. *Basin Planning*. Available online at: http://www.waterboards.ca.gov/rwqcb2/basin_planning.shtml. Accessed July 22, 2013.

Laguna Salada and Horse Stable Pond

The Sharp Park Golf Course is located within an 845-acre watershed.¹⁵⁸ HSP is located south of LS and consists of an open water pond and a freshwater wetland. It is connected to LS via an approximately 1,000-foot-long channel that was constructed to drain water from the lagoon to HSP, and together these three features form a wetland complex. In addition to water from LS, HSP receives water from Sanchez Creek from the east (see Figure 4). HSP is shallower and smaller than LS, and typical water depths range from one to three feet. Flood waters in the wetland complex are drained by pumps at HSP, which pump water into the Pacific Ocean during the winter, when water levels in HSP become too high.

The LS 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 HSP and LS represents the groundwater table. Groundwater flow from the watershed to the ocean maintains the pond elevations above sea level. Over the course of the year, surface inflows to LS exceed groundwater inflows to LS 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.¹⁵⁹

A hydrologic assessment report was prepared in 2009 for the SFRPD to improve the understanding of the hydrologic processes that affect the distribution of ecological habitats in the LS wetland system and flooding of the adjacent golf course.¹⁶⁰ The assessment characterized the variability of water level functions from year to year in the LS wetland system. Results from a water budget investigation reveal that the system is supplied with adequate water to fill HSP even in dry years. Variability of water levels in the wetlands from year to year is low due to the operation of the pumping station. Early spring water levels in the ponds are consistent among dry, normal, and wet water years because the water level is controlled by the pumping station. Dry season losses due to evapotranspiration and seepage do not likely vary much year to year. Surface water flows associated with winter storms provide the primary source of water into the wetland system. Groundwater inflow exceeds groundwater outflow (seepage); as a result, groundwater inflows contribute to the overall water budget of the system, and dry season water level recession occurs at a slightly slower rate than would be expected due to evapotranspiration losses alone.¹⁶¹

As part of the hydrological assessment, the seasonal variation of salinity in the wetland system was also monitored to characterize conditions and to assess potential impacts of saltwater encroachment. Salinity is a concern because of its potential to affect the survival of sensitive species that use this wetland habitat. During the monitoring period, salinity in HSP ranged between 0.7 and 2.5 ppt. Salinity in LS appears uniform and well mixed.¹⁶²

¹⁵⁸ USFWS. *Biological Opinion*. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹⁵⁹ Kamman Hydrology & Engineering, Inc. *Hydrologic Assessment*. This report is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹⁶⁰ Ibid.

¹⁶¹ Ibid.

¹⁶² Ibid.

Flood Hazard Zones

Flood hazard zones in Sharp Park are identified in the Flood Insurance Rate Maps (FIRMs) published by the Federal Emergency Management Agency (FEMA) in 2012.^{163,164} The FIRMs identify LS, HSP, and the lower reach of Sanchez Creek (labeled as Sharp Park Creek in the FIRMs) as Zone A (areas with a 1-percent annual chance of flooding). A larger area that includes a portion of the golf course southeast of LS is identified as Zone X (areas of 0.2-percent annual chance flood; areas of 1-percent annual chance flood with average depth of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1-percent annual chance flood).

Sharp Park is subject to the CCSF Floodplain Management Program as outlined in San Francisco Administrative Code Sections 2A.280 through 2A.285.

Sea Level Rise

In 2006, the California Climate Change Center reported a historic sea-level rise of seven inches in the last century and projected an additional rise of 22–35 inches by the end of this century. Since that time numerous other studies have published projected ranges of 7–23 inches, 20–55 inches, and 32–79 inches of sea-level rise for this same period, with the differences in these projections attributable to different methodologies used and how well or whether glacier ice melt is included in the calculations.¹⁶⁵ Sea level rise could increase flooding potential in coastal areas. 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 sea water to migrate into the LS wetland complex.¹⁶⁶

Impact HY-1: The proposed project would not violate water quality standards or otherwise substantially degrade water quality. (Less than Significant with Mitigation)

The proposed construction activities would involve excavation up to five feet bgs. Excavation could release sediment and other constituents of soil into local water bodies, if uncontrolled, would result in significant water quality impacts. Best Management Practices (BMPs) for erosion control would be implemented for all elements of the proposed project, such as installation of fiber rolls, silt fences, straw blankets, hydroseeding, and straw mulch/wood chips. These BMPs would ensure that ground-disturbing activities associated with the proposed project would not result in a substantial increase in the amount of sediment in runoff from the site which may ultimately discharge to surface water bodies.

As discussed in Section E.13, Biological Resources, **Mitigation Measure M-BIO-4a** requires that the SFRPD obtain all applicable permits from the SFBRWQCB, CCC, USACE, and CDFW to protect wetlands and natural habitat. This would further ensure that impacts to wetland habitat

¹⁶³ Federal Emergency Management Agency (FEMA). *Flood Insurance Rate Map (FIRM), San Mateo County, California, and Incorporated Areas, Panel 38 of 510, Map Number 06081C0038E*, Effective Date October 16, 2012. This map is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹⁶⁴ FEMA. *Flood Insurance Rate Map (FIRM), San Mateo County, California, and Incorporated Areas, Panel 126 of 510, Map Number 06081C0126E*, Effective Date October 16, 2012. This map is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹⁶⁵ California Natural Resources Agency. *2009 California Climate Adaptation Strategy, A Report to the Governor of the State of California in Responses to Executive Order S-13-2008*. Available online at: http://resources.ca.gov/climate_adaptation/. Accessed July 13, 2013.

¹⁶⁶ Kamman Hydrology & Engineering, Inc. *Hydrologic Assessment*. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

and water quality would be reduced to a less-than-significant level. A post-construction monitoring program would also be designed and implemented, as described in **Mitigation Measure M-BIO-4b**, which would ensure that erosion control measures and revegetation efforts meet standards and success criteria as determined in consultation with the SFBRWQCB.

To facilitate the proposed sediment and emergent vegetation removal activities in HSP and the connecting channel and to reduce potential impacts to CRLF, the water level in HSP or the connecting channel may be lowered through the use of the existing pumps in consultation with the USFWS, CDFW, and/or SFBRWQCB. This would result in a temporary increase in the amount of water discharged to the Pacific Ocean during the project construction. Discharge at Sharp Park is authorized under an existing NPDES permit issued to CCSF. The SFRPD would seek modification to the NPDES permit in consultation with the SFBRWQCB so that activities associated with the proposed project are reflected in the NPDES permit, if necessary. In addition, the SFRPD would seek an amendment to an existing Section 401 permit issued by the SFBRWQCB to reflect the proposed project, if required by the SFBRWQCB.

During the implementation of the sediment and emergent vegetation removal activities, sediment present at the bottom of HSP and the connecting channel would be disturbed, resulting in a temporary suspension of sediment to the water column. Although unlikely, these sediments may contain sulfides and other components which, once disturbed or suspended in the water column, could have adverse impacts to special-status species, their habitat, or water quality. When exposed to dissolved or atmospheric oxygen, sulfides transform to sulfuric acid, which in turn results in the formation of acid sulfate soils. An increase in the amount of exposed acid sulfate soils in water bodies generally causes a decrease in the pH of water (an increase in acidity of the water) and a decrease in the amount of dissolved oxygen in the water, causing anoxic conditions in which resuspension of anoxic hydrogen sulfide sediments may result in pulses of low oxygen conditions in HSP which could cause mortality of CRLF larvae and juveniles.¹⁶⁷ With implementation of **Mitigation Measure M-BIO-2b**, potential impacts to water quality resulting from acid sulfate soils, other chemical components, or anoxic conditions would be reduced to a less-than-significant level.

The proposed perennial pond, approximately 1,600 sf in area, would be constructed in consultation with USFWS, and all necessary permits from the CCC would be obtained. As of writing of this Initial Study, there are two potential locations for this pond. Both of them are located within Sharp Park, approximately 400 to 500 feet southeast of the existing pumphouse at HSP (see Figure 5). The water in the proposed pond would be supplied through surface water runoff and, depending on the location of the pond, through groundwater. Given the above, the proposed construction of the pond would result in a less-than-significant impact with respect to water quality.

In summary, with identified mitigation, the proposed project would not result in any significant water quality impacts.

Impact HY-2: The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. (Less than Significant)

No groundwater would be used for the proposed project, except that the proposed 1,600-sf pond may be designed to be fed by groundwater. The pond would be constructed by excavating up to

¹⁶⁷ Harry Gibbons and Robert Plotnikoff, Tetra Tech, Inc. *Acid Sulfate Soils Technical Memorandum*. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

five feet bgs. The pond would occupy a small area and the overall topography and drainage patterns surrounding the pond site, which gently slopes toward HSP, would not be altered. The amount of water retained in the pond would not be substantial compared with the total amount of water present in the area watershed at a given moment. In addition, the proposed pond would capture some of the surface runoff water or groundwater that would otherwise flow into HSP as it would be constructed in an area located higher in elevation than HSP.

In light of the above, the project would not result in substantial depletion of groundwater supplies or interference with groundwater recharge, and this impact is less than significant.

Impact HY-3: The proposed project would not result in altered drainage patterns that would cause substantial erosion or flooding or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. (Less than Significant)

None of the proposed project activities would substantially increase impervious surfaces or would contribute runoff water that would exceed the capacity of an existing or planned stormwater drainage system. Therefore, the proposed project would have a less-than-significant impact with respect to the creation of, or the contribution to, runoff water.

The proposed project would not substantially alter drainage patterns on the project site or in its vicinity. As part of the proposed project, a 1,600-sf pond would be constructed to establish habitat for CRLF. This pond would be constructed by excavating upland habitat, and is expected to retain surface water runoff, which would reduce the potential for flooding. Given the above, the proposed pond would result in a less-than-significant impact with respect to altered drainage patterns or flooding.

Impact HY-4: The proposed project would not expose people, housing, or structures, to substantial risk of loss due to flooding. (Less than Significant)

The golf course floods whenever the pumps at HSP are not able to keep up with the inflow from the watershed. Because the watershed east of PCH is much larger than the golf course, most of the runoff from the watershed drains via Sanchez Creek to HSP. As water levels rise in HSP, water flows through the connecting channel into LS.

The capacity of HSP and the connecting channel would be slightly increased as a result of the proposed sediment and emergent vegetation removal activities, but the increase in capacity would be small compared to the amount of runoff generated by a moderate to large storm. Therefore, changes to HSP and the connecting channel would not substantially alter the frequency of flooding, which is regulated primarily by the rate at which the pumps at HSP are able to discharge water to the ocean and by the intensity of rainfall in the watershed that governs the rate at which water is delivered to HSP via Sanchez Creek.

As part of the proposed project, steps and a maintenance walkway would be constructed and the existing retaining wall would be replaced at the HSP pumphouse. While these proposed structures would not be subject to building permit requirements of the City of Pacifica, San Francisco Department of Building Inspection (DBI), or any other agencies, the SFRPD would design and construct these structures in accordance with the California Uniform Building Code.

The existing pumphouse is located outside the Special Flood Hazard Areas (SFHAs), which are the areas subject to inundation by the 1-percent annual chance flood. The 1-percent annual chance flood (100-year flood), also known as the base flood, is a flood that has a one percent

chance of being equaled or exceeded in any given year.¹⁶⁸ The water level at the pumphouse and to a lesser extent throughout the entire wetland system is determined by rainfall and management of the pumps. Water levels are managed in the rainy season to ensure the protection of the CRLF egg masses. Typically, water levels in the wetland complex rise throughout the winter as egg masses are deposited and the pumps are adjusted upwards. Sometimes large storm events exceed the capacity of the pumps and water backs up on the golf course, however, it is very unlikely that the pumphouse itself would become inundated by flooding.¹⁶⁹ Furthermore, the proposed structures would not impede the flow of floodwater in a way that increases the elevation of floodwaters upstream. Therefore, the proposed project would result in a less-than-significant impact with respect to flooding.

In light of the above, the proposed project would not expose people, housing, or structures, to substantial risk of loss due to flooding, and this impact is less than significant.

Impact HY-5: The proposed project would not expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow. (No Impact)

The proposed project would not attract a significant number of visitors to Sharp Park or result in construction of dwelling units. The proposed project would have a less-than-significant impact with regard to exposing people or structures to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow.

The San Francisco General Plan Community Safety Elements describes tsunamis as follows:¹⁷⁰

“Tsunamis are large waves in the ocean generated by earthquakes, coastal or submarine landslides, or volcanoes. Damaging tsunamis are not common on the California coast. Most California tsunamis are associated with distant earthquakes (most likely those in Alaska or South America and recently in Japan), not with local earthquakes. Devastating tsunamis have not occurred in historic times in the Bay Area. Because of the lack of reliable information about the kind of tsunami runups that have occurred in the prehistoric past, there is considerable uncertainty over the extent of tsunami run-up that could occur. There is ongoing research into the potential tsunami run-up in California”

Sharp Park is within a tsunami inundation area.¹⁷¹ Overtopping of the seawall can be expected should a tsunami occur simultaneously with a severe storm event during high tide.¹⁷² None of the proposed project activities would increase the likelihood that people or structures would be exposed to a significant risk of loss, injury, or death due to inundation by seiche, tsunami, or

¹⁶⁸ FEMA. *Flood Insurance Rate Map (FIRM), San Mateo County, California, and Incorporated Areas, Panel 126 of 510, Map Number 06081C0126E*, Effective Date October 16, 2012. This map is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹⁶⁹ Lisa Wayne, SFRPD. *Email to Kei Zushi, San Francisco Planning Department, FEMA 100-year flood map*, April 29, 2013. This email is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹⁷⁰ City and County of San Francisco. *General Plan, Community Safety Element*, October, 2012. Available online at: http://www.sf-planning.org/ftp/General_Plan/Community_Safety_Element_2012.pdf. Accessed June 6, 2013.

¹⁷¹ California Department of Conservation. *San Mateo County Tsunami Inundation Maps*. Available online at: http://www.conservaion.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/SanMateo/Documents/Tsunami_Inundation_SouthSanFrancisco_PacificCoast_Quad_SanMateo.pdf. Accessed July 19, 2013.

¹⁷² Arup North America. *Sharp Park Sea Wall Evaluation*, February 5, 2010. This document is available for review as part of Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

mudflow. Therefore, the proposed project would have a less-than-significant impact with regard to this criterion.

Impact C-HY: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, would not make a considerable contribution to any cumulative significant effects related to hydrology or water quality. (Less than Significant with Mitigation)

As discussed above, in 2006, the California Climate Change Center reported a historic sea-level rise of seven inches in the last century and projected an additional rise of 22–35 inches by the end of this century. Since that time numerous other studies have published projected ranges of sea-level rise for this same period, with the differences in these projections attributable to different methodologies used and how well or whether glacier ice melt is included in the calculations.¹⁷³ The exact magnitude of sea level rise near the project site is unknown. Among the cumulative effects on water resources resulting from 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. The proposed project would not substantially affect existing uses on the project site and the project site would remain as open space. None of the proposed project activities would be anticipated to contribute to the effects of sea level rise. Therefore, the proposed project would not contribute considerably to any cumulative impact associated with sea level rise.

As of September 2013, there are no known past or present projects in the project vicinity that would, in combination of the proposed project, result in cumulative hydrology or water quality impacts. The Draft EIR prepared for the proposed 2006 SNRAMP, a reasonably foreseeable future project in the proposed project's vicinity, concluded that the proposed 2006 SNRAMP would not result in any significant impacts with respect to hydrology or water quality. Thus, no cumulative impact to hydrology or water quality within the project vicinity exists to which this project could potentially contribute.

The proposed project would not have a significant impact on hydrology or water quality with the implementation of **Mitigation Measures M-BIO-2b, M-BIO-4a, and M-BIO-4b**. Thus, the project would not contribute considerably to a cumulative impact to hydrology or water quality, even if one existed.

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
16. HAZARDS AND HAZARDOUS MATERIALS					
Would the project:					

¹⁷³ California Natural Resources Agency. 2009 *California Climate Adaptation Strategy, A Report to the Governor of the State of California in Responses to Executive Order S-13-2008*. Available online at: http://resources.ca.gov/climate_adaptation/. Accessed July 13, 2013.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 16c is not applicable because the project site is not within one-quarter mile of an existing or proposed school. The project site is not located near a public or private airport or within an airport land use plan area. Therefore, Questions 16e and 16f do not apply to the proposed project.

Impact HZ-1: The proposed project would not create a significant hazard through routine transport, use, disposal, handling or emission of hazardous materials. (No Impact)

The proposed project includes improvements to existing facilities and creation of habitat and would not involve routine transport, use, disposal, handling or emission of hazardous

materials.¹⁷⁴ Therefore, no impact would result from the proposed project with respect to the routine transport, use, disposal, handling or emission of hazardous materials.

Impact HZ-2: Implementation of the proposed project activities would not result in a significant increase in the mosquito or tick population. (Less than Significant)

San Mateo County Mosquito and Vector Control District (SMCMVCD) provides mosquito and insect control at Sharp Park. The SMCMVCD has programs for the control of mosquitoes and ticks, including mosquito-borne diseases such as the West Nile virus. The SMCMVCD's integrated pest management for mosquito control includes a preventive approach, underground source control, and mosquito control within pools, ponds, fountains, marshes, and creeks. The SMCMVCD's integrated management includes controlling mosquitoes in their immature stages before emerging as biting adults. Further the SMCMVCD programs include a Lyme disease program, a tick prevention and removal program, and a tick-borne diseases program.¹⁷⁵

The SMCMVCD mainly uses the following mosquito larva treatments:¹⁷⁶

- BVA-2 Oil: A refined petroleum distillate that breaks down in a few days. It is applied to the surface of standing water and causes mosquito larvae to drown.
- Methoprene: A juvenile growth hormone that is targeted specific to mosquito larvae. It mimics the growth hormone produced in a developing larva. They stop producing the hormone when they pupate. When methoprene is applied to the water, it keeps the larvae in a juvenile stage.
- *Bacillus thuringiensis israelis* (Bti): A bacteria that is toxic to mosquito larvae. The bacteria cause the stomach lining of mosquito larvae to rupture and ultimately killing the mosquito larvae.
- Mosquito fish (*Gambusia affinis*): These fish eat mosquito larvae. This is known to be a reliable biological control method.

The proposed improvements to the existing pumphouse would not change the depth or shape of water bodies. Therefore, these improvements would not create new areas of standing water that could lead to an increase the mosquito or tick population. As such, the proposed improvements to the pumphouse would have no impact on public health relative to mosquitoes and ticks.

Increased depths of HSP and the connecting channel as a result of the proposed sediment removal activities and a new perennial pond constructed as part of this project could increase the mosquito population in that area. The SMCMVCD would continue to control mosquitoes at the project site. The SFRPD would coordinate with the SMCMVCD in the implementation of the proposed sediment and emergent vegetation removal activities and the construction of the pond to minimize the potential for developing mosquito breeding habitat.

¹⁷⁴ Section 25501(h) of the California Health and Safety Code defines "Hazardous materials" as materials that, because of their quantity, concentration, or physical or chemical characteristics, pose a substantial present or potential hazard to human health and safety or to the environment if released to the workplace or environment.

¹⁷⁵ San Mateo County Mosquito and Vector Control District (SMCMVCD). Available online at: <http://www.smcmaad.org/index.htm>. Accessed July 11, 2013.

¹⁷⁶ SMCMVCD. *Preventative Approach*. Available online at: http://www.smcmaad.org/preventative_control.htm. Accessed July 11, 2013.

Over the past several years, sediments have accumulated in HSP and the connecting channel and enhanced the growth of cattails; cattail and tule stands provide ideal habitat for tule mosquitoes. The proposed project activities include removal of cattails and bulrush, which would reduce the habitat of tule mosquitoes. In addition, the SMCMVCD would continue to implement the Integrated Pest Management (IPM) program to control Lyme disease and tick-borne diseases.

The SFRPD proposes to implement the following BMPs to control the spread of mosquito-borne disease as part of this project.

1. Educate staff about the most effective ways to avoid being bitten by mosquitoes;
2. Remove small water features that contain standing water or treat those features with *Bacillus thuringiensis israelis* a biological control agent for mosquito larvae, if the features were to remain and Public Health Services were to identify a potential health hazard; and
3. Encourage staff to drain any standing water in stored equipment or temporary depressions.

In light of the above, the proposed project would result in a less-than-significant impact from mosquitoes or ticks.

Impact HZ-3: Implementation of the proposed project would not create a significant hazard through the use of pesticides for vegetation control. (No Impact)

No herbicides or pesticides would be used as part of this project. Therefore, no impact would result from the proposed project.

Impact HZ-4: The proposed project would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. (Less than Significant)

The proposed project could result in accidental release of hazardous materials into the environment. The proposed project would require the use of motor vehicles and motorized equipment for the project activities around HSP and the connecting channel. Hazardous materials likely to be used during the project construction activities include fuel, oil, solvents, and lubricants for equipment and equipment maintenance. Similar motor vehicles and motorized equipment are regularly used at Sharp Park for the ongoing maintenance work and there have been no known incidents at Sharp Park that resulted in release of a substantial amount of hazardous materials from motor vehicles and motorized equipment. Hazardous materials would be used in marginal quantities as part of this project and would be stored outside the project site. Any activities involving hazardous materials and hazardous waste¹⁷⁷ would be conducted in accordance with strict health and safety standards mandated by the Occupational Safety and Health Administration (OSHA). Therefore, the proposed project would result in less-than-significant impacts from accidental releases of hazardous materials.

¹⁷⁷ "Hazardous waste" is defined as any material that is relinquished, recycled, or inherently waste-like and falls under Title 22 of the California Code of Regulations. Division 4.5, Chapter 11, contains regulations for classifying hazardous wastes. A waste is considered hazardous if it causes human health effects, has the ability to burn, causes severe burns or damages materials, or causes explosions or generates toxic gases, in accordance with the criteria established in Article 3. Article 4 lists specific hazardous wastes, and Article 5 identifies specific waste categories, including hazardous wastes, as defined by the Resource Conservation and Recovery Act, non-Resource Conservation and Recovery Act hazardous wastes, extremely hazardous wastes, and special wastes.

Impact HZ-5: Implementation of the proposed project activities would not result in substantial fire hazard impacts. (Less than Significant)

Motorized equipment used during construction would increase the risk of fire. Workers involved in the proposed project activities would carry fire extinguishers in their trucks and would use appropriate fire prevention and suppression measures during construction. Therefore, the proposed project would result in less-than-significant impacts from fire hazards.

Impact C-HZ: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, would not make a considerable contribution to any cumulative significant impacts related to hazardous materials. (Less than Significant with Mitigation)

As of September 2013, there are no known past or present projects in the project vicinity that would, in combination of the proposed project, result in cumulative hazardous materials impacts during the construction period of the proposed project. The Draft EIR prepared for the proposed 2006 SNRAMP, a reasonably foreseeable future project in the proposed project's vicinity, concluded that the proposed 2006 SNRAMP would not result in any significant impacts with respect to hazardous materials. Thus, no cumulative impact to hazardous materials within the project vicinity exists to which this project could potentially contribute.

Impacts from hazards are generally site-specific, and typically do not result in cumulative impacts. The proposed project would not have a significant impact with respect to hazardous materials on the project site or in its vicinity. Thus, the proposed project would not contribute considerably to a cumulative hazardous materials impact, even if one existed.

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
17. MINERAL AND ENERGY RESOURCES—					
Would the project:					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Encourage activities which result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The project site is designated Mineral Resource Zone 1 (MRZ-1) by the California Division of Mines and Geology (CDMG) under the Surface Mining and Reclamation Act of 1975.¹⁷⁸ This

¹⁷⁸ California Division of Mines and Geology (CDMG). *Mineral Land Classification Map, San Mateo and San Francisco Counties* by Melvin C. Stinson, Michael W. Manson, and John J. Pioppert, 1982. This map is available for review as part of

designation indicates the area where there is adequate geologic information which indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence. This zone is applied where well developed lines of reasoning, based on economic-geologic principles and adequate data, indicate that the likelihood for occurrence of significant mineral deposits is nil or slight.¹⁷⁹

There are no operational mineral resource recovery sites in the project site or its immediate vicinity whose operations or accessibility would be affected by the construction or operation of the proposed project. Therefore, questions 16a and 16b are not applicable to this project.

Impact ME-1: Implementation of the proposed project would not encourage activities which would result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner. (Less than Significant)

During the project construction, fuel (diesel and gasoline) would be consumed by motorized equipment and by trucks and other construction equipment including a backhoe, Aquamog, and long-arm excavator. Use of these fuels by the project work crews are expected to be minor in amount. Given the minor scope of the proposed project, use of energy and fuels by the proposed project is expected to be less than significant.

Impact C-ME: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the site vicinity, would not make a considerable contribution to any cumulative significant impacts related to energy or minerals. (Less than Significant)

As of September 2013, there are no known past or present projects in the project vicinity that would, in combination of the proposed project, result in energy or mineral impacts. The Initial Study prepared for the proposed 2006 SNRAMP concluded that the proposed 2006 SNRAMP would not result in any significant impacts with respect to energy or minerals. Thus, no cumulative impact to energy or minerals within the project vicinity exists to which this project could potentially contribute.

The project-generated demand for electricity would be negligible in the context of overall demand within Sharp Park and its vicinity. Therefore, the proposed project would not contribute to a cumulative energy or minerals impact, even if one existed.

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
18. AGRICULTURE AND FOREST RESOURCES— Would the project					

Case File No. 2012.1427E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California 94103.

¹⁷⁹ CDMG. *Guideline for Classification and Designation of Mineral Lands*. Available online at: <http://www.conservation.ca.gov/smgbl/Guidelines/Documents/ClassDesig.pdf>. Accessed April 8, 2013.

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)) or timberland (as defined by Public Resources Code Section 4526)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Because no farmland or forest land is present within the project site, Questions relevant to impacts to agricultural resources and forest land are not applicable to the proposed project.

The project site is located entirely within Sharp Park within the City of Pacifica. The California Department of Conservation's Farmland Mapping and Monitoring Program identifies the project site as either "Urban and Built-up Land" or "Other Land."¹⁸⁰

"Urban and Built-up Land" is defined as "land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel and commonly include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures.

"Other Land" is defined as "land not included in any other mapping category; commonly include low density rural developments, brush, timber, wetland, and riparian areas; not suitable for livestock grazing, confined livestock, poultry, or aquaculture facilities, strip mines, borrow pits, and water bodies smaller than 40 acres; and include vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres."

Because the project site does not contain agricultural uses and is not zoned for such uses, the proposed project would not convert any prime farmland, unique farmland, or Farmland of Statewide Importance to non-agricultural use, and it would not conflict with existing zoning for agricultural land use or a Williamson Act contract, nor would it involve any changes to the environment that could result in the conversion of farmland. There is likewise no forest land on the project site.

¹⁸⁰ California Department of Conservation, *San Mateo County Important Farmland 2010*, October 2011. Available online at: <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2010/smt10.pdf>. Accessed March 29, 2013.

As of September 2013, there are no known past or present projects in the project vicinity that would, in combination of the proposed project, result in agriculture or forest resources impacts during the construction period of the proposed project. The Draft EIR prepared for the proposed 2006 SNRAMP concluded that the proposed 2006 SNRAMP would not result in any significant impacts with respect to agriculture or forest resources. Thus, no cumulative impact to agriculture or forest resources within the project vicinity exists to which this project could potentially contribute.

The proposed project would have no impacts to agricultural or forest resources, and would not contribute to cumulative agriculture or forest resources impact, even if one existed.

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
19. MANDATORY FINDINGS OF SIGNIFICANCE—Would the project:					
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have impacts that would be individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

As discussed above, with the implementation of the mitigation measures the proposed project is anticipated to have only less-than-significant impacts in the environmental topics discussed. The foregoing analysis identifies potentially significant impacts to archeological resources, paleontological resources, human remains, air quality, biological resources, and hydrology and water quality. These potentially significant impacts would be mitigated through implementation of mitigation measures as described below and more fully within Section F of this Initial Study.

As discussed in Section E.4, Cultural and Paleontological Resources, it is possible that below-ground archeological and paleontological resources and human remains may be present within the project site. Any potential significant impacts to archeological and paleontological resources and human remains resulting from soil-disturbing activities would be reduced to a less-than-

significant level with the implementation of **Mitigation Measures M-CP-2, M-CP-3, and M-CP-4**, which include measures to address accidental discovery of archeological and paleontological resources and human remains.

As discussed in Section E.7, Air Quality, construction associated with the proposed project activities could generate fugitive dust during soil-disturbing activities including sediment and emergent vegetation removal activities, excavation, site grading, installation of proposed structures, and realignment of golf cart path. Although the proposed project would involve mostly wet soils, unmitigated, fugitive dust generated by the proposed project could result in significant air quality impacts. Any potential significant impacts with respect to fugitive dust would be reduced to a less-than-significant level with the implementation of **Mitigation Measure M-AQ-2**, which addresses the control and suppression of fugitive dust.

Additionally, as discussed in Section E.13, Biological Resources, it is possible that the proposed project could result in a significant impact to special-status species including, but not limited to, CRLF, SFGS, WPT, salt marsh common yellowthroat, and black-crowned night heron. **Mitigation Measures M-BIO-2a, M-BIO-2b, and M-BIO-2c** would reduce the impacts to a less-than-significant level. It is also possible that the proposed project would result in significant impacts to the wetlands in the project area or its vicinity. With the implementation of **Mitigation Measures M-BIO-4a and M-BIO-4b**, such potential significant impacts would be reduced to a less-than-significant level. Accordingly, the proposed project would not result in a significant impact to biological resources.

Furthermore, as discussed in Section E. 15, Hydrology and Water Quality, the proposed project could result in significant impacts to water quality resulting from acid sulfate soils, other chemical components, or anoxic conditions. With the implementation of **Mitigation Measure M-BIO-2b**, this impact would be reduced to a less-than-significant level.

Cumulative projects in the project site vicinity primarily include the proposed 2006 SNRAMP as discussed in Section E of this Initial Study. With incorporation of identified mitigation measures, the proposed project would not result in a considerable contribution to any cumulatively significant impacts.

In light of the above, the proposed project would not result in any significant impacts.

F. MITIGATION MEASURES AND IMPROVEMENT MEASURES

Mitigation Measure M-CP-2 - Accidental Discovery

The following mitigation measure is required to avoid any potential adverse effect from the proposed project on accidentally discovered buried or submerged historical resources as defined in *CEQA Guidelines* Section 15064.5(a)(c). The project sponsor shall distribute the Planning Department archeological resource "ALERT" sheet to the project prime contractor; or to any project subcontractor (including demolition, excavation, grading, etc. firms) involved in soils disturbing activities within the project site. Prior to any soils disturbing activities being undertaken each contractor is responsible for ensuring that the "ALERT" sheet is circulated to all field personnel including, machine operators, field crew, supervisory personnel, etc. The project sponsor shall provide the Environmental Review Officer (ERO) with a signed affidavit from the responsible parties (prime contractor and subcontractor(s)) to the ERO confirming that all field personnel have received copies of the Alert Sheet.

Should any indication of an archeological resource be encountered during any soils disturbing activity of the project, the project Head Foreman and/or project sponsor shall immediately notify the ERO and shall immediately suspend any soils disturbing activities in the vicinity of the discovery until the ERO has determined what additional measures should be undertaken.

If the ERO determines that an archeological resource may be present within the project site, the project sponsor shall retain the services of an archaeological consultant from the pool of qualified archaeological consultants maintained by the Planning Department archaeologist. The archeological consultant shall advise the ERO as to whether the discovery is an archeological resource, retains sufficient integrity, and is of potential scientific/historical/cultural significance. If an archeological resource is present, the archeological consultant shall identify and evaluate the archeological resource. The archeological consultant shall make a recommendation as to what action, if any, is warranted. Based on this information, the ERO may require, if warranted, specific additional measures to be implemented by the project sponsor.

Measures might include: preservation in situ of the archeological resource; an archaeological monitoring program; or an archeological testing program. If an archeological monitoring program or archeological testing program is required, it shall be consistent with the Environmental Planning (EP) division guidelines for such programs. The ERO may also require that the project sponsor immediately implement a site security program if the archeological resource is at risk from vandalism, looting, or other damaging actions.

The project archeological consultant shall submit a Final Archeological Resources Report (FARR) to the ERO that evaluates the historical significance of any discovered archeological resource and describes the archeological and historical research methods employed in the archeological monitoring/data recovery program(s) undertaken. Information that may put at risk any archeological resource shall be provided in a separate removable insert within the final report.

Copies of the Draft FARR shall be sent to the ERO for review and approval. Once approved by the ERO, copies of the FARR shall be distributed as follows: California Archaeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy and the ERO shall receive a copy of the transmittal of the FARR to the NWIC. The EP division of the Planning Department shall receive one bound copy, one unbound copy and one unlocked, searchable PDF copy on CD of the FARR along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest or

interpretive value, the ERO may require a different final report content, format, and distribution than that presented above.

Mitigation Measure M-CP-3 - Paleontological Training Program and Alert Sheet

To reduce the potential for the proposed project to result in a significant impact on paleontological resources, the SFRPD shall arrange for a paleontological training by a qualified paleontologist regarding the potential for such resources to exist in the project site and how to identify such resources. The training shall also include a review of penalties for looting and disturbance of these resources. An alert sheet shall be issued and shall include the following:

1. A discussion of the potential to encounter paleontological resources;
2. Instructions for reporting observed looting of a paleontological resource; and instruct that if a paleontological deposit is encountered within a project area, all soil-disturbing activities in the vicinity of the deposit shall cease and the ERO shall be notified immediately.
3. If an unanticipated paleontological resource is encountered during project activities, all project activities shall stop, and a professional paleontologist shall be hired to assess the potential paleontological resource and its significance. The findings shall be presented to the ERO, who shall determine the additional steps to be taken before work in the vicinity of the deposit is authorized to continue.

Mitigation Measure M-CP-4 - Human Remains, Associated or Unassociated Funerary Objects

The treatment of human remains and of associated or unassociated funerary objects discovered during any ground-disturbing activity shall comply with applicable State and Federal Laws, including immediate notification to the San Mateo County Coroner and in the event of the Coroner's determination that the human remains are Native American remains, notification to the Native American Heritage Commission (NAHC) who shall appoint a Most Likely Descendant (MLD) (Pub. Res. Code Sec. 5097.98). The project archaeological consultant, SFRPD, and MLD shall make all reasonable efforts to develop an agreement for the treatment of, with appropriate dignity, human remains and associated or unassociated funerary objects (CEQA Guidelines. Sec. 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, curation, possession, and final disposition of the human remains and associated or unassociated funerary objects.

Mitigation Measure M-AQ-2 - Preparation and Implementation of a Dust Control Plan

The SFRPD shall comply with the following requirements to control fugitive dust:

- The SFRPD shall designate an individual to monitor compliance with dust control requirements identified in this mitigation measure;
- Water all active construction areas sufficiently to prevent dust from becoming airborne (without creating runoff) in any area of land clearing, earth movement, excavation, and other dust-generating activity. Watering shall occur as needed, and whenever wind speeds exceed 15 miles per hour. Reclaimed water shall be used whenever possible;
- Establish shutdown conditions based on wind, soil migration, and other factors;
- Limit the area subject to construction activities at any one time;
- During excavation and dirt-moving activities, wet sweep or vacuum the routes and paths where work is in progress at the end of the workday;

- Cover any inactive (no disturbance for more than seven days) stockpiles greater than ten cubic yards or 500 square feet of excavated materials, backfill material, import material, gravel, sand, road base, and soil with a 10 mil (0.01 inch), wildlife-friendly polyethylene plastic or equivalent tarp and brace it down or use other equivalent soil stabilization techniques;
- Limit the amount of soil in hauling trucks to the size of the truck bed, and secure the load with a tarpaulin;
- Enforce a 10-mile per hour (mph) speed limit for vehicles entering and exiting construction areas;
- All soil stockpiles, if any, shall be protected against wind and rainfall erosion at all times. Wildlife-friendly plastic sheeting or other similar material shall be used to cover soils and shall be securely anchored by sandbags or other suitable means. At no time shall any stockpiled materials be allowed to erode into any water body or drainage facility or onto any roadway; and
- Install and use wheel washers to clean truck tires.

The SFRPD shall prepare and submit a site-specific Dust Control Plan to the ERO for records. The Plan shall detail a protocol for project compliance with the above requirements.

Mitigation Measure M-BIO-2a - Protection of CRLF, SFGS, and WPT

1. All sensitive habitats outside the construction site shall be avoided during and following project implementation. All biologists working on the project and their roles shall be approved by the USFWS and CDFW¹⁸¹ based on their qualifications. All approved biologists shall be part of the Project Implementation Team. The SFRPD shall designate one of the USFWS/CDFW-approved biologists to oversee and coordinate all avoidance and survey tasks of the Project Implementation Team. Prior to the commencement of any project-related construction activity, an approved biological monitor shall flag the sensitive areas and/or the limits of the construction site with suitable markers that are easily discernible by construction equipment operators. No construction equipment or personnel shall enter the sensitive areas designated for avoidance by the project;
2. The lead USFWS/CDFW-approved biological monitor shall be present at all planning meetings prior to project implementation. A USFWS/CDFW-approved biological monitor shall present an educational program at one or more such meetings regarding the listed species and their habitats. Every person who works on project implementation shall receive this education program and sign a form indicating they have attended and agree to abide by the terms and conditions being implemented to avoid take of listed species and/or habitat. A USFWS/CDFW-approved biological monitor shall be present at the site during all construction activities including, but not limited to, vegetation and sediment removal, placement of concrete support structures for the walkway, replacement of the retaining wall and pathway repair. The biological monitor shall have the authority to stop work temporarily in order to protect the listed species or the flagged sensitive areas;
3. Prior to commencement of any construction activities and daily prior to construction each day, a USFWS/CDFW-approved biological monitor shall survey the site for listed species. A USFWS/CDFW-approved biologist shall also oversee the installation of exclusion fencing in segments or fully enclosing components of the construction site as appropriate. The biological monitor shall inspect the integrity of the exclusion fencing on a daily basis;

¹⁸¹ Formally known as CDFG

4. During the proposed sediment and vegetation removal activities, if required, up to three biological monitors shall be present to: 1) monitor the area of vegetation or sediment removal; 2) observe the material as it is transferred to the shoreline; and 3) inspect material as it is loaded into a container/dump bed that will allow the water in the excavated sediment to drain out before removal from the site;
5. Biological monitors shall complete a daily monitoring log that records information on compliance and construction activities as well as avoidance measures implemented each day during the project. Each monitor shall submit a daily monitoring report from to the lead biologist before the start of the next construction day. Photographic documentation of project activities shall accompany each daily monitoring log. Within 60 days of completion of the project, the SFRPD shall submit a report to the USFWS and CDFW documenting compliance with the terms and conditions and avoidance of unauthorized take of species or habitat;
6. No earthmoving or soil disturbing work shall occur starting October 31 and ending June 1, the breeding season for CRLF and the season when SFGS are less active on the site;
7. Terrestrial vegetation in undisturbed areas around HSP and the connecting channel shall be cleared by manual means to a height of four inches (or a height that allows visibility of the ground) under the supervision of an approved biological monitor and checked for the presence of CRLF, SFGS, and WPT;
8. Prior to ground disturbing activities associated with construction, including the use of staging or vehicle access areas or the removal or placement of fill or construction materials, rodent burrows in the construction site shall be hand excavated by a USFWS/CDFW-approved biologist until the burrow terminates or until a maximum depth of 30 centimeters;
9. Vehicle speeds in the project area shall not exceed 10 miles an hour. The USFWS/CDFW-approved biological monitor shall inspect for CRLF, SFGS, and WPT underneath any vehicle that is parked for 30 minutes or more prior to moving the vehicle. All construction personnel shall inspect under their tires and vehicle if it is in idle for more than five minutes and has not been inspected by the on-site monitor. Vehicles accessing the construction site shall be limited to the minimum necessary to complete the project. Project personnel shall park personal vehicles at a staging area located away from all aquatic habitats or areas of sensitive upland habitat;
10. Any workers on the site that observe any frog, snake, or turtle shall immediately report their findings to the on-site biological monitor and immediately suspend work that may be harmful to the individual. The monitor shall identify the animal if it has not left the area. If a CRLF, SFGS, or WPT is observed in the work area, it shall be relocated by a USFWS/CDFW-approved biological monitor to the nearest suitable aquatic habitat out of harm's way. Work may only recommence if CRLF, SFGS, and WPT move out of harm's way or the animal is relocated by the biological monitor. Work may not recommence until the biological monitor has returned to the work area and gives approval;
11. Only USFWS/CDFW-approved personnel shall be allowed to capture or attempt to capture and move CRLF, SFGS, WPT, or other non-listed wildlife (e.g., treefrogs, small rodents) in the work area;

12. Erosion control best management practices (silt fences, coir rolls, straw bales) shall be employed as part of the dewatering of sediments after removal and while soils are exposed. The erosion control measures shall not include netting, plastic or natural monofilament netting or other materials that may entrap CRLF, SFGS, or WPT;
13. After completion of the project, the access routes in the wetland shall be revegetated with appropriate native plants and erosion control measures, as described in Measure 12, as outlined above, shall be installed on exposed soils with slopes of 3:1 or greater;
14. All construction activities shall occur in uplands and on the golf course. Stockpiling and staging areas shall be located in the uplands and in areas cleared for species and the golf course. Construction materials (bricks, boards, shoring, concrete forms, etc.) shall be elevated approximately four to six inches above ground to minimize the potential for species to take cover under these items. If feasible, materials shall be staged on a trailer/truck bed to avoid contact with the ground. Construction materials shall be brought to on-site staging areas as close to the time they are needed as possible;
15. The SFRPD shall minimize the potential for harm, harassment, injury, and death of federally listed wildlife species resulting from project-related activities including implementation of the Conservation Measures in the Biological Opinion;
16. If requested, during or upon completion of construction activities, the SFRPD shall ensure the USFWS, CDFW, or their authorized agents have immediate access to the project area. The on-site biologist and/or a representative from the USACE/SFRPD shall accompany USFWS personnel on an on-site inspection of the project area(s) to review project effects to CRLF and SFGS and their habitat;
17. The SFRPD shall ensure compliance with the Reporting Requirements of the Biological Opinion;
18. During the course of construction activities, biological monitors may determine that relocation of a CRLF or SFGS is necessary for the safety of individual animals. If it is determined that a SFGS needs to be moved, the USFWS shall be contacted for further guidance. Individuals shall be relocated to appropriate sites away from disturbance on Sharp Park property;
19. Within nine months of issuance of the Biological Opinion, the SFRPD shall develop, for the USFWS review and approval, a monitoring plan for the new perennial pond. The plan shall include monitoring of: 1) the use of the pond by all life stages of CRLF and SFGS, 2) the amount of emergent vegetation and open water available, and 3) how effective barriers are at preventing entry by people and off-leash dogs. If predators become established in the pond they shall be immediately removed and the USFWS shall be notified; and
20. Implementation of the pond monitoring plan shall begin immediately following the construction of the new pond.

Mitigation Measure M-BIO-2b - Protection of Special-Status Species and Water Quality from Acid Sulfate Soils and Other Components

Prior to commencement of any on-site work related to the proposed removal of sediment and emergent vegetation in HSP or the connecting channel and culverts that link HSP and LS,

sediment core sampling tests shall be conducted in the manner specified in this mitigation measure.

The result of the sediment core sampling tests and remediation measures recommended by a qualified SFRPD biological/hydrological consultant, if any, shall be submitted to the USFWS and CDFW for review and approval prior to commencement of any on-site remediation work or sediment/vegetation removal work at HSP or the connecting channel and culverts. If the USFWS or CDFW determines, based on the results of the sediment core sampling tests, that remediation measures are required, the SFRPD shall submit a remediation and monitoring plan to all applicable resource agencies for review and approval prior to implementation of the remediation measures. Copies of all correspondence with the resource agencies shall be submitted to the ERO for review. 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 and comment prior to commencement of any on-site work related to the sampling tests. The Work Plan shall describe, at a minimum, compliance with Items 2 through 6 of this mitigation measure. Copies of all correspondence with the resource agencies shall be submitted to the ERO for review.

2. Sampling of Sediment Cores

The sampling test shall include collection of, at minimum, one sediment core from HSP, two from the connecting channel, and one from LS. The exact locations of sampling shall be determined pursuant to the work plan developed in accordance with Item 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 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, 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 newly restored HSP and connecting channel.

Sediment cores shall be analyzed based on Toxicity Reference Values (TRVs) from the USEPA and Screening Quick Reference Tables (SQuiRT) from the NOAA.¹⁸² 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 analysis¹⁸³ to determine the appropriate remediation measures. The analysis results and determination shall be submitted to the USFWS, CDFW, and ERO for review.

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 by the USFWS, CDFW, and ERO based on the results of Items 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 resource agencies for review and approval. Copies of all correspondence with the resource agencies shall be submitted to the ERO for review.

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, as approved by the USFWS and CDFW.

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

¹⁸² NOAA, Office of Response and Restoration. *SQuiRT Cards*. Available online at: <http://response.restoration.noaa.gov/cpr/sediment/squirt/squirt.html>. Accessed July 17, 2013.

¹⁸³ A toxic pathway analysis identifies potential risks and toxicities to species that may be affected by localized increases in acidity, hypoxia, or dissolved metals concentration.

- 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.

6. Monitoring

During sediment and vegetation removal in HSP and the connecting channel and culverts, 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.¹⁸⁴

Mitigation Measure M-BIO-2c - Protection of Bird Species

Vegetation removal activities shall be conducted outside the breeding season (February 1 to August 31), unless the following specific conditions are met: a breeding bird survey by a qualified biologist has been conducted prior to any vegetation removal activities. 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 nesting birds from being disturbed by power tools or other equipment. Weeds may be pulled by hand no closer than 50 feet from the nest.

Mitigation Measure M-BIO-4a - Protection of Wetlands and Natural Habitat

The SFRPD shall obtain all applicable permits from the SFBRWQCB, CCC, USACE, and CDFW to protect wetlands and natural habitat. Measures identified in these permits shall be applied, in addition to the following measures, unless otherwise specified by resource agencies:

1. In areas where work is not directly taking place, a minimum 100-foot buffer surrounding all wetlands, ponds, streams, drainages, and other aquatic habitats located on or within 100 feet of the project site shall be clearly designated on the final project construction plans and marked on the site with wildlife-friendly orange construction fencing or silt fencing. If the area is on a slope, silt fencing or other comparable management measures will be installed to prevent polluted runoff, as well as equipment, from entering the buffer area. Signs shall be installed every 100 feet on or adjacent to the buffer fence that read, "Environmentally Sensitive Area – Keep Out." Fencing and management measures shall be installed and inspected prior to project implementation and maintained throughout the restoration period. No equipment mobilization, grading, clearing, storage of equipment or machinery, vehicle or equipment washing, or similar activity, may occur until a representative of the SFRPD has inspected and approved the fencing and/or management measures installed around these features;

¹⁸⁴ 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).

2. Vehicle and equipment operators shall use existing access roads and shall remain outside of wetlands and riparian areas that are not directly associated with the proposed project. Project construction and staging areas shall be delineated with construction fencing and shall avoid wetland habitat to the maximum extent feasible; and
3. All vehicles shall be brought in clean and free of weeds to prevent the spread or introduction of invasive plant species. Vehicles and equipment shall be fueled, maintained, and parked at least 100 feet from wetlands. Each morning, operators shall inspect all equipment that requires the use of fuel or fluids for leaks.

Mitigation Measure M-BIO-4b - Wetland Mitigation Plan for Temporarily Affected Areas

Consistent with the requirements for a Section 401 water quality certification permit, the SFRPD shall prepare a wetland mitigation plan for temporarily effected wetlands. Additionally, because the proposed project includes habitat restoration (i.e., construction of a perennial pond), the CCC may require an objective performance evaluation to determine project success which would include a monitoring program and methods for evaluating performance, which could be accomplished through implementation of the wetland mitigation plan. The wetland mitigation plan shall include, at a minimum, a description of the following:

- Proposed project's physical and biological impacts;
- Mitigation goals;
- Mitigation work plan;
- Management and maintenance plan;
- Success criteria and performance indicators;
- Monitoring plan; and
- Site protection measures.

The components of the above mitigation plan may be altered, supplemented, or deleted during the SFBRWQCB's review process, as the SFBRWQCB has final authority over the terms of the water quality certification.

G. PUBLIC NOTICE AND COMMENT

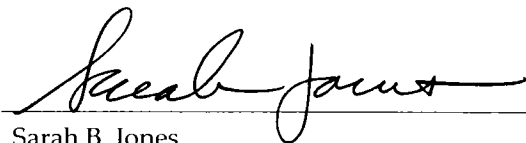
A "Notification of Project Receiving Environmental Review" was sent out on January 15, 2013, to the owners of properties within 300 feet of the Sharp Park boundaries and to occupants of properties adjacent to the project site, as well as to other interested parties. The Planning Department received several letters in response to the notice. Respondents requested to receive environmental review documents and/or expressed concerns regarding the proposed project, which included: (1) impacts to CRLF and SFGS; (2) impacts to other special-status species and wetland habitats; and 3) historic resource impacts. These issues are addressed in the appropriate topic areas in Section E, Evaluation of Environmental Effects.

H. DETERMINATION

On the basis of this initial study:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.

DATE: September 18, 2013



Sarah B. Jones
Environmental Review Officer

for
John Rahaim
Director of Planning

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