

**ATTACHMENT A MITIGATION MONITORING AND REPORTING PROGRAM
PACIFIC ROD AND GUN CLUB UPLAND SOIL REMEDIAL ACTION PROJECT**

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approving Party		
AESTHETICS						
AE-1	The project could have a long-term adverse effect on a scenic vista, scenic resources, or the existing visual character or quality of the site and its surroundings.	<p>Mitigation Measure M-AE-3: Screening Vegetation</p> <p>The following mitigation measure is required to avoid any potential adverse effect from the project on the scenic quality of the area. The SFPUC shall identify the location and spacing of new plantings that would, at maturity, screen views of the eastern portion of the site. New plants shall include native species indigenous to the San Francisco Peninsula and/or shrubs and trees typical of the surrounding area. Plantings (by way of species type, size, and location) shall ensure that direct views of the site east of the entrance are substantially obstructed from any location within a ten-year period. The SFPUC shall monitor and photograph screening vegetation annually after completion of remediation activities. If it is determined that success standards are not being met, SFPUC shall take immediate action to re-plant screening vegetation to ensure compliance by the tenth-year period.</p>	<ol style="list-style-type: none"> SFPUC EMB SFPUC CMB SFPUC NRLMD 	<ol style="list-style-type: none"> SFPUC BEM SFPUC BEM SFPUC NRLMD 	<ol style="list-style-type: none"> Ensure that contract documents include a requirement for appropriate landscape plans for screening vegetation. Monitor to ensure that contractor implements measures in contract documents. Report noncompliance and ensure corrective action. Annually monitor screening vegetation to ensure that plantings are on track to substantially obstruct direct views of the site east of the entrance road within 10 years. If it appears that this success standard is not on track to be met in time, SFPUC shall take immediate action to re-plant appropriate screening vegetation that ensures compliance by the 10th year period. 	<ol style="list-style-type: none"> Design Construction Post Construction
CULTURAL RESOURCES						
CP-1	The proposed project could 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.	<p>Mitigation Measure M-CP-1a: Record and Reconstruct the Semi-Circular Station Paths at Skeet Fields 4 – 7</p> <p>The SFPUC or its contractor shall implement the following to comply with the Secretary of Interior’s Standards for Rehabilitation:</p> <ul style="list-style-type: none"> Prior to commencement of site remediation, the SFPUC shall record the original size, configuration, and locations of the semi-circular station paths at skeet fields 4 – 7 through the use of digital photography and mapping. The original dimensions and locations of the station paths shall be mapped on a site plan to aid the later reconstruction of these features. Following site remediation, the SFPUC shall reconstruct the semi-circular station paths which define skeet fields 4 – 7 in the same size, configuration, and location as the original station paths, including the level terrace and linear arrangement of the fields. As the existing concrete materials post-date the period of significance and are not character-defining, concrete may be substituted for other compatible materials (e.g. crushed rock, gravel, or wood boardwalks outlining the path configurations). 	<ol style="list-style-type: none"> SFPUC EMB SFPUC CMB 	<ol style="list-style-type: none"> SFPUC BEM SFPUC BEM 	<ol style="list-style-type: none"> Ensure that contract documents include requirements to record information about and reconstruct the skeet fields as described in the mitigation measure. Monitor to ensure that contractor implements measures in contract documents. Report noncompliance and ensure corrective action. 	<ol style="list-style-type: none"> Design Pre Construction / Post Construction
		<p>Mitigation Measure M-CP-1b: Record, Protect, and Return (or Replace in-Kind) the High/Low Houses and Wood Fences at Skeet Fields 4 – 7</p> <p>The SFPUC or its contractor shall implement the following measures to comply with the Standards for Rehabilitation:</p> <ul style="list-style-type: none"> Prior to commencement of site remediation, the SFPUC shall record and document the existing structural condition and location of the wood frame high/low houses at skeet fields 4 – 7 (total of 8 structures) and the wood fences which separate these fields (total of 4 fences). This shall be accomplished through; 1) digital photography of all such features, 2) mapping their original locations and configuration on a site plan, and 3) numbering and cataloging each structure. These features shall be carefully relocated to a secure, onsite or off 	<ol style="list-style-type: none"> SFPUC EMB SFPUC CMB 	<ol style="list-style-type: none"> SFPUC BEM SFPUC BEM 	<ol style="list-style-type: none"> Ensure that contract documents include requirements to record, document, relocate, protect, and return to their original positions the wood frame high/low houses and wood fences, as described in the mitigation measure. Monitor to ensure that contractor implements measures in contract documents. Report noncompliance and ensure corrective action. 	<ol style="list-style-type: none"> Design Pre Construction/ Post Construction

**MITIGATION MONITORING AND REPORTING PROGRAM (Cont.)
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Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
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CULTURAL RESOURCES (Cont.)						
CP-1 (Cont.)		<p>site location to avoid damage. If stored onsite, they may be relocated to alternate safety zones as remediation progresses. The most appropriate temporary relocation sites shall be determined by the SFPUC prior to commencement of work.</p> <ul style="list-style-type: none"> During site remediation activities, the SFPUC shall protect these features from accidental damage during earth moving by storing these elements within a locked, chain-link fence enclosure and posting "Keep Out" or "No Trespassing" signs. Following site remediation, the SFPUC shall return these features to their original positions at the reconstructed skeet fields 4 – 7. Based on the pre-construction recording and depending on their structural condition, any damaged components should be repaired in keeping with the Secretary of Interior's Standards for Rehabilitation. If they were previously damaged beyond repair, they are in poor structural condition, or if it is infeasible to return them to their original location due to their condition or other factors, they may be replaced in-kind in a similar size, design, location, and materials as existing, in keeping with the Standards. 				
		<p>Mitigation Measure M-CP-1c: Protect the Four Contributory Buildings During Construction. The SFPUC or its contractor shall implement the following measures to comply with the Standards for Rehabilitation:</p> <ul style="list-style-type: none"> During site remediation activities, the four contributory buildings (Clubhouse, Caretaker's House, Rifle Range Building, and the Shell House), shall be adequately protected from accidental damage due to construction activities and vandalism. These structures shall be surrounded by protective fencing and shall be secured from entry by boarding up all windows and doors, and posting "Keep Out" or "No Trespassing" signs on each building. Following site remediation, these buildings shall be returned to their original appearance by removing all temporary construction fencing, window and door protection, and signage. 	<ol style="list-style-type: none"> SFPUC EMB SFPUC CMB 	<ol style="list-style-type: none"> SFPUC BEM SFPUC BEM 	<ol style="list-style-type: none"> Ensure that contract documents include measures to protect the four contributory buildings during construction. Monitor to ensure that contractor implements measures in contract documents. Report noncompliance and ensure corrective action. 	<ol style="list-style-type: none"> Design Construction
CP-2	The project could cause a substantial adverse change in the significance of an archeological resource pursuant to CEQA Guidelines, §15064.5.	<p>Mitigation Measure M-CP-2: Accidental Discovery of Archeological Resources</p> <p>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; to any project subcontractor (including demolition, excavation, grading, foundation, etc. firms); or utilities firm 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, subcontractor(s), and utilities firm) to the ERO confirming that all field personnel have received copies of the Alert Sheet.</p> <p>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.</p> <p>If the ERO determines that an archeological resource may be present within the project site, the project sponsor shall retain the services of a qualified archeological consultant, based on standards developed by the Planning Department archeologist. 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</p>	<ol style="list-style-type: none"> SFPUC EMB SFPUC CMB SFPUC BEM (Archeologist) SFPUC BEM (Archeologist) 	<ol style="list-style-type: none"> SFPUC BEM SFPUC BEM and ERO SFPUC BEM and ERO SFPUC BEM 	<ol style="list-style-type: none"> Ensure that measures related to archaeological discoveries are included in contract documents. Ensure that all personnel attend environmental training prior to beginning work, receive "ALERT" sheet, and sign the training sign-in sheets. Maintain file of signature sheets for submittal to ERO. Monitor to ensure that the contractors implement measures in contract document, report non-compliance and ensure corrective action. Evaluate the potential discovery and advise the ERO as to the significance of the discovery. If warranted, proceed with measures that may include the following: <ol style="list-style-type: none"> On-site preservation of resource; Archaeological monitoring program with prior review/approval of ERO; or 	<ol style="list-style-type: none"> Design Preconstruction and Construction Construction Post Construction

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CULTURAL RESOURCES (Cont.)						
CP-2 (Cont.)		<p>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.</p> <p>Measures might include: preservation in situ of the archeological resource; an archeological 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.</p> <p>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 describing 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.</p> <p>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 Archeological 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 Environmental Planning division of the Planning Department shall receive one bound copy, one unbound copy and one unlocked, searchable PDF copy on CD three copies 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.</p>			<p>c. Archeological testing program with prior review/approval of ERO.</p> <p>4. Prepare a Final Archeological Resources Report. Submit to ERO for review and approval. Submit to others as required once approved by ERO.</p>	
CP-3	The project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	<p>Mitigation Measure M-CP-3: Accidental Discovery of Paleontological Resources</p> <p>To reduce the potential for the proposed project to result in a significant impact on paleontological resources, the SFPUC 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 could consist of a recorded presentation that could be reused for new personnel. The training shall also include a review of penalties for looting and disturbance of these resources. An alert sheet shall be prepared by the qualified paleontologist and shall include the following:</p> <ol style="list-style-type: none"> 1. A discussion of the potential to encounter paleontological resources; 2. Instructions for reporting observed looting of a paleontological resource; and instructions that if a paleontological deposit is encountered within a project area, all soil-disturbing activities in the vicinity of the deposit shall cease within 50 feet and the ERO shall be notified immediately; and, 3. Who to contact in the event of an unanticipated discovery. <p>If potential fossils are discovered by construction crews, all earthwork or other types of ground disturbance within 50 feet of the find shall stop immediately until the qualified professional paleontologist can assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the fossil. The paleontologist may also propose modifications to the stop-work radius based on the nature of the find, site geology, and the activities occurring on the site. If treatment and salvage is required, recommendations shall be consistent with SVP 1995 guidelines and currently accepted scientific practice, and shall be subject to review and approval by the ERO or designee. If required, treatment for fossil remains may include preparation and recovery of fossil</p>	<ol style="list-style-type: none"> 1. SFPUC EMB 2. SFPUC CMB/BEM (Paleontologist) 3. SFPUC CMB/BEM (Paleontologist) 4. SFPUC CMB/BEM 	<ol style="list-style-type: none"> 1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM 4. SFPUC BEM/ERO 	<ol style="list-style-type: none"> 1. Ensure that contract documents include measures related to attending training about, and to the discovery of, paleontological specimens. 2. Obtain and review résumé or other documentation on paleontologist's qualifications. Ensure that contractor's staff participate in the environmental training prior to beginning work and sign the training sign-in sheet. Maintain file of sign-in sheets. In the event of a discovery, confirm suspension of work, examine fossil, and report as required. Earthwork and ground disturbance within 50 feet of find shall stop until qualified paleontologist can assess nature/importance of find and make a recommendation regarding further action. 3. Monitor to ensure that the contractor implements measures in contract documents including insuring that all potential discoveries are reported as required and that 	<ol style="list-style-type: none"> 1. Design 2. Preconstruction and construction 3. Construction 4. Construction

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CULTURAL RESOURCES (Cont.)						
CP-3 (Cont.)		materials so that they can be housed in an appropriate museum or university collection, and may also include preparation of a report for publication describing the finds. The SFPUC shall be responsible for ensuring that treatment is implemented and reported to the San Francisco Planning Department. If no report is required, the SFPUC shall nonetheless ensure that information on the nature, location, and depth of all finds is readily available to the scientific community through university curation or other appropriate means.			contractor suspends work in the vicinity. Report noncompliance and ensure corrective action.	1.
CP-4	The project could disturb human remains, including those interred outside of formal cemeteries.	<p>Mitigation Measure M-CP-4: Accidental Discovery of Human Remains</p> <p>The treatment of human remains and of associated or unassociated funerary objects discovered during any soil-disturbing activities shall comply with applicable state laws. This shall include immediate notification of the coroner of the county within which the project is located and, in the event of the coroner's determination that the human remains are Native American, notification of the California Native American Heritage Commission, which shall appoint a most likely descendant (MLD) (PRC Section 5097.98). The archeological consultant, SFPUC, and MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of human remains and associated or unassociated funerary objects (CEQA Guidelines Section 15064.5[d]). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. The PRC allows 24 hours to reach agreement on these matters. If the MLD and the other parties do not agree on the reburial method, the SFPUC shall follow Section 5097.98(b) of the PRC, which states that "the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance."</p>	<ol style="list-style-type: none"> 1. SFPUC EMB 2. SFPUC CMB/BEM (Archeologist) 3. SFPUC CMB/BEM 	<ol style="list-style-type: none"> 1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM and ERO 	<ol style="list-style-type: none"> 1. Ensure that contract documents include measures related to discovery of human remains. 2. If potential human remains or funerary objects are encountered, mobilize an archeologist to confirm existence of human remains. If human remains are confirmed, perform required coordination and notifications. 3. Monitor to ensure that the contractor implements measures in contract documents including insuring that all potential human remains are reported as required and that contractor suspends work in the vicinity. Report noncompliance and ensure corrective action. 	<ol style="list-style-type: none"> 2. Design 3. Construction 4. Construction
TRANSPORTATION AND CIRCULATION						
TR-1	The project could 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, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit	<p>Mitigation Measure M-TR-1: Implement Flag Control to Maintain Bicycle and Pedestrian Access</p> <p>The SFPUC and its contractor shall require flaggers to be present onsite during daily construction activities. Flaggers shall be located at the entry and exit locations of the project site and shall coordinate the movement of construction vehicles in and out of the project site. In addition, flaggers shall maintain access to on- and off-street bicycle and pedestrian facilities and the use of flaggers shall reduce any intermittent blockages to such facilities, and eliminate any long-term blockages to such facilities.</p>	<ol style="list-style-type: none"> 1. SFPUC EMB 2. SFPUC CMB 	<ol style="list-style-type: none"> 1. SFPUC EMB 2. SFPUC CMB 	<ol style="list-style-type: none"> 1. Incorporate appropriate language into contract documents including requirement for contractor to have flaggers onsite during daily construction activities to perform duties described in measure. 2. Monitor to ensure that contractor implements measures in contract documents. Report noncompliance and ensure corrective action. 	<ol style="list-style-type: none"> 1. Design 2. Construction

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NOISE						
NO-2	The project would not result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.	Mitigation Measure M-NO-2a: Preconstruction Surveys and Repair SFPUC shall conduct a preconstruction survey of onsite buildings to document preconstruction building conditions and identify fragile buildings. Following construction, the buildings shall be reinspected. Any new cracks or other changes in structures shall be compared to preconstruction conditions and a determination made as to whether project activities could have caused such damage. In the event that the project is demonstrated to have caused the damage, SFPUC shall be responsible for having the damage repaired to the pre-existing condition.	1. SFPUC EMB 2. SFPUC CMB	1. SFPUC BEM 2. SFPUC BEM	1. Ensure that contract documents include requirements to conduct preconstruction and post construction surveys of building conditions, and a report submittal for building surveys including implementation of repairs for damage. 2. Monitor to ensure that contractor implements measures in contract documents including a pre-construction and post-construction survey report and repair to preconstruction condition if damages were found. Report non-compliance and ensure corrective action.	1. Design 2. Preconstruction/Construction
		Mitigation Measure M-NO-2b: Construction Equipment Restrictions Near Buildings To minimize vibration effects, no earthmoving equipment shall be used within 1.5 feet of the Clubhouse, Caretaker's House, Rifle Range Building and Shell House; only small earthmoving equipment shall be used between 1.5 feet and 15 feet of the these buildings. No vibratory equipment shall be used within 8 feet of the Clubhouse, Caretaker's House, Rifle Range Building, and Shell House and only small vibratory equipment (including compactors) shall be used between 8 feet and 26 feet of these buildings. Small earthmoving equipment and vibrators shall be used within 10 feet and 17 feet, respectively, from other buildings.	1. SFPUC EMB 2. SFPUC CMB	1. SFPUC BEM 2. SFPUC CMB	1. Incorporate appropriate language into contract documents including requirement for contractor to use smaller earthmoving equipment within certain distances of buildings/structures, as described in measure. 2. Monitor to ensure that contractor implements measures in contract documents. Report noncompliance and ensure corrective action.	1. Design 2. Construction
AIR QUALITY						
AQ-1	The project's construction activities would not violate an air quality standard or contribute substantially to an existing or projected air quality violation.	Mitigation Measure M-AQ-1: Construction Emissions Minimization A. Construction Emissions Minimization Plan. The project sponsor shall reduce construction-related NOx emissions by a minimum of 40 percent as compared to that estimated in this environmental analysis. Prior to issuance of a construction permit, the project sponsor shall submit a Construction Emissions Minimization Plan (Plan) to the Environmental Review Officer (ERO) for review and approval by an Environmental Planning Air Quality Specialist. The requirements of this plan may be met by demonstrating project compliance with the following: <ol style="list-style-type: none"> 1. Limit truck idling time to two minutes. Legible and visible signs shall be posted in multiple languages (English, Spanish, Chinese) in designated queuing areas and at the construction site to remind operators of the two minute idling limit; 2. The project sponsor shall require that construction operators properly maintain and tune equipment in accordance with manufacturer specifications; and 3. All on-road haul trucks (i.e., trucks used for disposal of excavated material and delivery of clean fill) shall be year 2010 or newer. 	1. SFPUC PMB 2. SFPUC EMB 3. SFPUC CMB/BEM	1. SFPUC BEM/ERO 2. SFPUC BEM 3. SFPUC BEM/ERO	1. Prepare and submit to ERO the Construction Emissions Minimization Plan (CEMP) 2. Certify compliance with CEMP and ensure all appropriate language incorporated into contract documents including monthly reporting and final reporting to be prepared and submitted by contractor 3. Monitor to ensure that contractor implements measures in contract documents and CEMP including monthly submittal of reports and submittal of final construction activity summary report.	1. Design 2. Design 3. Construction

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AIR QUALITY (Cont.)						
AQ-1 (Cont.)		<p>Should the project sponsor choose to comply with this mitigation measure through any means other than the requirements listed above, the Plan shall demonstrate an equivalent reduction in NOx emissions (40%). The project sponsor shall submit to the ERO, prior to construction, all applicable construction equipment information required to ensure that the project sponsor has fully complied with this mitigation measure.</p> <p>B. Reporting. Monthly reports shall be submitted to the ERO indicating the construction phase and off-road equipment information used during each phase including the information required in A, above.</p> <p>C. Certification Statement and On-site Requirements. Prior to the commencement of construction activities, the project sponsor must certify (1) compliance with the Plan, and (2) all applicable requirements of the Plan have been incorporated into contract specifications.</p>				
BIOLOGICAL RESOURCES						
BI-1	The project could have a substantial adverse effect, either directly or through habitat modifications, on species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.	<p>Mitigation Measure MI-BI-1a: Protocol Surveys for Special-Status Plants</p> <p>The SFPUC shall retain a qualified botanist to conduct preconstruction CDFG protocol-level surveys for special-status plants (in particular San Francisco Bay spineflower, blue coast gilia, San Francisco wallflower, and dune tansy) on the project site and adjacent suitable habitat during the blooming period for these species. Surveys shall occur in the spring for San Francisco Bay spineflower (April – July), blue coast gilia (April – July), and San Francisco wallflower (March – June), and in the late summer for dune tansy (July – October).</p> <p>Survey results shall be mapped and documented in a technical memorandum and provided to the Planning Department. If no special-status plants are identified during surveys, then these plants shall be assumed to be absent from the project site. If special-status plants are found during surveys, suitable habitat shall be mapped for avoidance in order to account for seasonal growth variability from year to year, when plants may not bloom but remain present in the seed bank. Suitable habitat areas shall be demarcated by a qualified botanist with flagging or orange fencing with signs that read “Environmentally Sensitive Area – Keep Out.” These markings shall be installed before construction begins and continuously maintained throughout construction.</p>	<ol style="list-style-type: none"> 1. SFPUC CMB/BEM (Qualified Biologist) 2. SFPUC EMB 3. SFPUC CMB/BEM 	<ol style="list-style-type: none"> 1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM 	<ol style="list-style-type: none"> 1. Obtain and review resume or other documentation of consulting biologist’s qualifications. Conduct pre-construction surveys at appropriate times. Document survey results in technical memorandum. Mark suitable habitat areas and maintain markings throughout construction. 2. Ensure that contract documents include fencing and signage measures. 3. Monitor to ensure that contractor(s) implements measures in contract documents. Report noncompliance, and ensure corrective action. 	<ol style="list-style-type: none"> 1. Preconstruction and Construction 2. Design 3. Construction
		<p>Mitigation Measure M-BI-1b: Relocation of Special-Status Plants</p> <p>If special-status plants are located within the remediation site and cannot be avoided during remediation, then a plan shall be developed in coordination with CDFW to relocate them to suitable habitat within the Lake Merced shoreline area. This can be done either through salvage and transplanting or by collection and propagation of seeds or other vegetative material. Any plant relocation would be done under the supervision of a qualified botanist.</p>	<ol style="list-style-type: none"> 1. SFPUC BEM 2. SFPUC EMB 3. SFPUC CMB/BEM 	<ol style="list-style-type: none"> 1. SFPUC BEM 2. SFPUBEM 3. SFPUC BEM 	<ol style="list-style-type: none"> 1. Develop a special-status plant relocation plan. 2. Ensure that contract documents include measures for relocation of special-status plants. 3. Monitor to ensure that contractor implements measures in contract documents. Report noncompliance and ensure corrective action. 	<ol style="list-style-type: none"> 1. Preconstruction 2. Design 3. Construction

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BIOLOGICAL RESOURCES (Cont.)						
BI-1 (Cont.)		<p>Mitigation Measure M-BI-1c: Worker Environmental Awareness Program Training</p> <p>A project-specific Worker Environmental Awareness Program (WEAP) training shall be developed and implemented by a qualified biologist for the project and attended by all personnel prior to beginning work onsite. The WEAP training shall generally include but not be limited to the following:</p> <ul style="list-style-type: none"> • Applicable State and federal laws, environmental regulations, project permit conditions, and penalties for non-compliance; • Special-status plant and wildlife species with potential to occur on or in the vicinity of the project site, avoidance measures, and a protocol for encountering such species including a communication chain; • Preconstruction surveys and biological monitoring requirements associated with each phase of work; • Known sensitive resource areas in the project vicinity which are to be avoided and/or protected (e.g. wetlands) as well as approved project work areas; and • Best Management Practices (BMPs) and their location on the project site for erosion control and/or species exclusion. 	<ol style="list-style-type: none"> 1. SFPUC EMB 2. SFPUC CMB/BEM 3. SFPUC CMB 	<ol style="list-style-type: none"> 1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM 	<ol style="list-style-type: none"> 1. Ensure that contract documents include measures for contractor to attend project-specific WEAP 2. Obtain and review resume or other documentation of consulting biologist's qualifications. Develop worker training program and ensure that all construction personnel participate in the environmental training prior to beginning work at the job site. Require workers to sign the training program sign-in sheet. Maintain file of training sign-in sheets. 3. Monitor to ensure that contractor implements measures in contract documents. Report noncompliance and ensure corrective action. 	<ol style="list-style-type: none"> 1. Design 2. Preconstruction 3. Preconstruction and construction
		<p>Mitigation Measure M-BI-1d: Avoidance and Minimization Measures for Western Pond Turtle</p> <p>During construction at the project site, the SFPUC shall ensure a biological monitor is present during installation of exclusion fencing and initial vegetation clearing and grading. Also, the following measures shall be implemented:</p> <ul style="list-style-type: none"> • Within one week before construction commences, a qualified biologist shall supervise the installation of exclusion fencing along the boundaries of the work area, as the biologist deems necessary to prevent western pond turtles from entering the work area. The construction contractor shall install CDFW-approved species exclusion fencing, with a minimum height of 3 feet above ground surface and with an additional 4–6 inches of fence material buried such that species cannot crawl under the fence. Fencing installed along the north border (lakeside border) of the site can be multipurpose silt fencing (see Mitigation Measure M-BI-3, Wetland Protection, below) and exclusion fencing. • A qualified biologist shall survey the project area within 48 hours before the onset of initial ground-disturbing activities and shall be present during initial vegetation clearing and ground-disturbing activities. The biological monitor shall monitor the exclusion fencing weekly to confirm proper maintenance and inspect for turtles. If turtles are found, the SFPUC shall halt construction in the vicinity that poses a threat to the individual as determined by the qualified biologist. If possible, the individual shall be allowed to move out of the project area of its own volition (e.g., if it is near the exclusion fence that can be temporarily removed to let it pass). The qualified biologist shall relocate turtles to the nearest suitable habitat should they not leave the work area of their own accord. Construction shall resume after the individual is out of harm's way. If western pond turtles occur repeatedly onsite after the exclusion fencing has been installed, a qualified biologist shall initiate preconstruction sweeps of the project site for this species prior to start of construction on a daily basis and thereafter throughout the duration of the project. • During project activities, excavations deeper than 6 inches shall have a sloping escape ramp of earth or a wooden plank installed at a 3:1 rise; openings, such as pipes, where western pond turtles might seek refuge shall be covered when not in use; and all trash that may attract predators or hide western pond turtles shall be properly contained each day, removed from the worksite, and disposed of regularly. Following site remediation, the construction contractor shall remove all trash and construction debris from the work areas. 	<ol style="list-style-type: none"> 1. SFPUC EMB 2. SFPUC CMB/BEM (Qualified Biologist) 3. SFPUC CMB/BEM 	<ol style="list-style-type: none"> 1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM 	<ol style="list-style-type: none"> 1. Ensure that contract documents include applicable avoidance and minimization measures for western pond turtles. 2. Obtain and review resume or other documentation of consulting biologist's qualifications. Monitor exclusion fence installation, conduct preconstruction surveys, species relocation and monitoring, including weekly fence inspection. Document activities in monitoring logs. 3. Monitor to ensure that contractor(s) implements measures in contract documents. Report noncompliance, and ensure corrective action. 	<ol style="list-style-type: none"> 1. Design 2. Preconstruction and Construction 3. Construction

**MITIGATION MONITORING AND REPORTING PROGRAM (Cont.)
PACIFIC ROD AND GUN CLUB UPLAND SOIL REMEDIAL ACTION PROJECT**

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approving Party		
BIOLOGICAL RESOURCES (Cont.)						
BI-1 (Cont.)		<p>Mitigation Measure M-BI-1e: Nesting Bird Protection Measures</p> <p>Nesting birds and their nests shall be protected during construction by use of the following:</p> <ul style="list-style-type: none"> Removal of trees, scrub vegetation and structures shall occur outside the bird nesting season (February 1 to August 30), to the extent feasible. If removal of trees, scrub vegetation or structures during bird nesting season cannot be fully avoided, a qualified wildlife biologist shall conduct preconstruction nesting surveys within seven days prior to the start of such activities or after any construction breaks of 14 days or more. Surveys shall be performed for the project site and suitable habitat within 250 feet of the project site in order to locate any active passerine (perching bird) nests and within 500 feet of the project site to locate any active raptor (birds of prey) nests or double-crested cormorant or heron rookeries. If active nests are located during the preconstruction bird nesting survey, the wildlife biologist shall evaluate if the schedule of construction activities could affect the active nests and the following measures shall be implemented based on their determination: <ul style="list-style-type: none"> If construction is not likely to affect the active nest, it may proceed without restriction; however, a biologist shall regularly monitor the nest to confirm there is no adverse effect and may revise their determination at any time during the nesting season. In this case, the following measure would apply. If construction may affect the active nest, the biologist shall establish a no disturbance buffer. Typically, these buffer distances are between 25 feet and 250 feet for passerines and between 300 feet and 500 feet for raptors. These distances may be adjusted depending on the level of surrounding ambient activity (e.g., if the project area is adjacent to a road or active trail) and if an obstruction, such as a building, is within line-of-sight between the nest and construction. For bird species that are federally and/or state-listed sensitive species (i.e., fully protected, endangered, threatened, species of special concern), an SFPUC representative, supported by the wildlife biologist, shall consult with the USFWS and/or CDFW regarding modifications to nest buffers, prohibiting construction within the buffer, modifying construction, and removing or relocating active nests that are found on the site. Removing inactive passerine nests may occur at any time. Inactive raptor nests shall not be removed unless approved by the USFWS and/or CDFW. Removing or relocating active nests shall be coordinated by the SFPUC representative with the USFWS and/or CDFW, as appropriate, given the nests that are found on site. Any birds that begin nesting within the project area and survey buffers amid construction activities are assumed to be habituated to construction-related or similar noise and disturbance levels and no work exclusion zones shall be established around active nests in these cases. 	<ol style="list-style-type: none"> SFPUC EMB SFPUC CMB/BEM (Qualified Biologist) SFPUC CMB 	<ol style="list-style-type: none"> SFPUC BEM SFPUC BEM SFPUC BEM 	<ol style="list-style-type: none"> Ensure that requirements related to nesting bird protection are included in contract documents. Obtain and review resume or other documentation of consulting biologist's qualifications. Conduct surveys as required. If active nests are located during survey, establish buffer zones, consulting with USFWS/CDFW as necessary, and monitor regularly. Document monitoring activities in logs. Monitor to ensure that contractor(s) implements measures in contract documents. Report noncompliance, and ensure corrective action. 	<ol style="list-style-type: none"> Design Preconstruction and Construction Construction
		<p>Mitigation Measure M-BI-1f: Avoidance and Minimization Measures for Special-Status Bats</p> <p>In coordination with the SFPUC, a preconstruction survey for special-status bats shall be conducted by a qualified biologist in advance of tree and structure removal within the project site to characterize potential bat habitat and identify active roost sites. Should potential roosting habitat or active bat roosts be found in trees and/or structures to be removed under the project, the following measures shall be implemented:</p> <ol style="list-style-type: none"> Removal of trees and structures shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15; outside of bat maternity roosting season (approximately April 15 – August 31) and outside of months of winter torpor (approximately October 15 – February 28), to the extent feasible. If removal of trees and structures during the periods when bats are active is not feasible and active bat roosts being used for maternity or hibernation purposes are found on or in the immediate vicinity of the project site 	<ol style="list-style-type: none"> SFPUC EMB SFPUC CMB/BEM (Qualified Biologist) SFPUC CMB/BEM 	<ol style="list-style-type: none"> SFPUC BEM SFPUC BEM SFPUC BEM 	<ol style="list-style-type: none"> Ensure that contract documents include applicable bat avoidance and minimization measures. Obtain and review resume or other documentation of consulting biologist's qualifications. Conduct pre-construction survey. If roosts are found, implement appropriate measures. Document activities in monitoring logs. Monitor to ensure that contractor(s) 	<ol style="list-style-type: none"> Design Preconstruction and Construction Construction

**MITIGATION MONITORING AND REPORTING PROGRAM (Cont.)
PACIFIC ROD AND GUN CLUB UPLAND SOIL REMEDIAL ACTION PROJECT**

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approving Party		
BIOLOGICAL RESOURCES (Cont.)						
BI-1 (Cont.)		<p>where tree and structure removal is planned, a no-disturbance buffer of 100 feet shall be established around these roost sites until they are determined to be no longer active by the qualified biologist.</p> <p>3. The qualified biologist shall be present during tree and structure removal if active bat roosts are present. Trees and structures with active roosts shall be removed only when no rain is occurring or is forecast to occur for 3 days and when daytime temperatures are at least 50°F.</p> <p>4. Removal of trees with active or potentially active roost sites shall follow a two-step removal process:</p> <ol style="list-style-type: none"> 1. On the first day of tree removal and under supervision of the qualified biologist, branches and limbs not containing cavities or fissures in which bats could roost, shall be cut only using chainsaws. 2. On the following day and under the supervision of the qualified biologist, the remainder of the tree may be removed, either using chainsaws or other equipment (e.g. excavator or backhoe). <p>5. Removal of structures containing or suspected to contain active bat roosts shall be dismantled under the supervision of the qualified biologist in the evening and after bats have emerged from the roost to forage. Structures shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to the roost.</p> <p>6. Bat roosts that begin during remediation are presumed to be unaffected, and no buffer would be necessary</p>			implements measures in contract documents. Report noncompliance, and ensure corrective action.	
BI-2	The project could have a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS.	<p>Mitigation Measure M-BI-2: Restoration of Coastal Scrub, Riparian Scrub, and Wetlands</p> <p>The habitat functions and services of all coastal scrub habitat, arroyo willow riparian scrub habitat, and freshwater emergent wetlands affected during construction shall be restored in-place to pre-project conditions. A Riparian and Wetland Restoration and Mitigation Monitoring Plan shall be prepared for the affected areas, subject to approval by the appropriate regulatory agencies, and shall generally include, but not be limited, to the following:</p> <ul style="list-style-type: none"> • A final grading plan for the affected coastal scrub habitat, riparian scrub habitat, and wetlands which would restore the topography of the affected habitat areas to pre-project conditions; • A planting plan, composed of native coastal scrub, riparian scrub, and freshwater emergent wetland plant species, consistent with the coastal scrub, riparian habitat and wetlands of Lake Merced; • A weed control plan to prevent the spread of invasive non-native plant species on the project site; • Performance criteria for the revegetated areas that establish success thresholds over a specific amount of time (typically five years) as determined by the regulatory agencies with jurisdiction over the affected areas; • A monitoring and reporting program under which progress of the revegetated areas shall be tracked to ensure survival of the mitigation plantings. The program shall document overall health and vigor of mitigation plantings throughout the monitoring period and provide recommendations for adaptive management as needed to ensure the site is successful, according to the established performance criteria. An annual report documenting monitoring results and providing recommendations for improvement throughout the year shall be provided to the regulatory agencies; and • A best management practices element describing erosion control measures to be installed around the affected areas following mitigation planting in order to avoid sediment runoff into the adjacent waters of Lake Merced. 	<ol style="list-style-type: none"> 1. SFPUC CMB/BEM 2. SFPUC EMB 3. SFPUC CMB/BEM 4. SFPUC NRLMD 	<ol style="list-style-type: none"> 1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM 4. SFPUC NRLMD 	<ol style="list-style-type: none"> 1. Prepare Riparian and Wetland Restoration and Mitigation Monitoring Plan (RWRMMP) and submit to appropriate regulatory agencies. 2. Ensure that contract documents include restoration measures. 3. Ensure that contractor implements measures in contract documents. 4. Perform post-construction monitoring and annual reporting for 5 years. 	<ol style="list-style-type: none"> 1. Design 2. Design 3. Construction 4. Post Construction

**MITIGATION MONITORING AND REPORTING PROGRAM (Cont.)
PACIFIC ROD AND GUN CLUB UPLAND SOIL REMEDIAL ACTION PROJECT**

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approving Party		
BIOLOGICAL RESOURCES (Cont.)						
BI-3	The project could have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the Clean Water Act and state protected wetlands.	<p>Mitigation Measure M-BI-3: Wetland Protection.</p> <p>At the project site, wetland protection measures shall be applied to protect state and federal jurisdictional wetlands. These measures shall include the following:</p> <ul style="list-style-type: none"> • A protective barrier (such as silt fencing) shall be erected around the adjacent wetland feature to isolate it from remediation activities; • Signage shall be installed on the fencing to identify sensitive habitat areas and restrict construction activities; • No equipment mobilization, grading, clearing, or storage of equipment or machinery, or similar activity shall occur at the project site until a representative of SFPUC has inspected and approved the wetland protection fencing; and • The SFPUC shall ensure that the temporary fencing is continuously maintained until all remediation is completed. <p>A fencing material meeting the requirements of both water quality protection and wildlife exclusion may be used.</p>	1. SFPUC EMB 2. SFPUC CMB	1. SFPUC BEM 2. SFPUC BEM	1. Ensure that wetland protection measures are included in contract documents. 2. Monitor to ensure that contractor implements measures in contract documents. Report noncompliance and ensure corrective action.	1. Design 2. Construction

SFPUC = San Francisco Public Utilities Commission
 NRLMD = Natural Resources and Lands Management Division (SFPUC)
 BEM = Bureau of Environmental Management (SFPUC)
 EMB = Engineering Management Bureau (SFPUC)
 CMB = Construction Management Bureau (SFPUC)

CCSF = City and County of San Francisco
 ERO = Environmental Review Officer (CCSF – Environmental Planning)