



SAN FRANCISCO PLANNING DEPARTMENT

Memo to the Planning Commission

HEARING DATE AUGUST 7, 2014

1650 Mission St.
Suite 400
San Francisco,
CA 94103-2479

Reception:
415.558.6378

Fax:
415.558.6409

Planning
Information:
415.558.6377

Date: July 31, 2014
Case No. **Case No. 2008.1396E** – CEQA Findings
Case No. 2008.1396R – General Plan Referral
Project Name **SFPUC Regional Groundwater Storage and Recovery Project**
Zoning: N/A; Various locations, San Francisco Peninsula
Block/Lot No.: N/A; Various locations; San Francisco Peninsula. See attachment for individual locations.
Project Sponsor: San Francisco Public Utilities Commission
Greg Bartow
525 Golden Gate Ave., 10th Floor
San Francisco, CA 94102
Staff Contact: Paolo Ikezoe – (415) 575-9137
Paolo.Ikezoe@sfgov.org
Recommendations: **Adopt California Environmental Quality Act Findings**
Approve General Plan Referral

PROPOSED PROJECT

The San Francisco Public Utilities Commission (“SFPUC”) proposes the Groundwater Storage and Recovery Project. The project proposes to install the 16 new groundwater wells along the SFPUC Regional Water System, at various locations throughout the San Francisco Peninsula in San Mateo County. The sites would have permanent wells installed and would require temporary construction easements and staging areas, temporary and permanent access roads, permanent pipeline easements and permanent utility easements. Under the Project, SFPUC would provide supplemental SFPUC surface water to the Partner Agencies during normal and wet years and in turn the Partner Agencies would reduce their groundwater pumping for the purpose of allowing the amount of groundwater in the South Westside Groundwater Basin to recharge. Then, during dry years, the Partner Agencies and the SFPUC would pump the increased stored groundwater using 16 new well facilities. The dry-year groundwater supply would be blended with water from the SFPUC’s regional water system and would as a result increase the available water supply to all regional water system customers during dry years. All project components would be located outside of the City and County of San Francisco.

REQUIRED COMMISSION ACTION*

In order for the project to proceed, the Commission must approve the following:

- Adoption of CEQA Findings – Case No. 2008.1396E
- General Plan Referral – Case No. 2008.1396R

RECOMMENDATIONS:	Adopt CEQA Findings Approve General Plan Referral
-------------------------	--

Attachments:

Draft CEQA Findings Motion
Mitigation Monitoring and Reporting Program
Draft General Plan Referral Motion

*Final EIR draft motions to be provided under separate cover.



SAN FRANCISCO PLANNING DEPARTMENT

Planning Commission Draft Motion

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) FINDINGS

HEARING DATE AUGUST 7, 2014

1650 Mission St.
Suite 400
San Francisco,
CA 94103-2479

Reception:
415.558.6378

Fax:
415.558.6409

Planning
Information:
415.558.6377

Date: July 31, 2014
Case No. **Case No. 2008.1396E**
Project Name **For SFPUC Regional Groundwater Storage and Recovery Project**
Zoning: N/A; Various locations, San Francisco Peninsula
Block/Lot No.: N/A; Various locations; San Francisco Peninsula. See attachment for individual locations.
Project Sponsor: San Francisco Public Utilities Commission
Greg Bartow
525 Golden Gate Ave., 10th Floor
San Francisco, CA 94102

Staff Contact: Paolo Ikezoe – (415) 575-9137
Paolo.Ikezoe@sfgov.org

ADOPTING FINDINGS UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, INCLUDING FINDINGS REJECTING ALTERNATIVES AS INFEASIBLE, ADOPTING A STATEMENT OF OVERRIDING CONSIDERATIONS, AND ADOPTING A MITIGATION, MONITORING, AND REPORTING PROGRAM RELATING TO THE SAN FRANCISCO PUBLIC UTILITY'S PROPOSED PROJECT TO CONSTRUCT AND OPERATE IN SAN MATEO COUNTY A REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT TO SUPPLY UP TO 7.2 MILLION GALLONS PER DAY OF GROUNDWATER DURING DRY YEARS OR EMERGENCIES

PREAMBLE

On April 10, 2013, the Department published the Draft Environmental Impact Report ("DEIR") and provided public notice in a newspaper of general circulation of the availability of the DEIR for public review and comment for a 45-day period (the public review period was extended for two weeks, concluding on June 11, 2013, resulting in a 62-day public review period), and of the date and time of the Planning Commission public hearing on the DEIR; this notice was mailed to the Department's list of persons requesting such notice and other interested parties, posted near the Project site, and made available at the main public library in San Francisco and at public libraries in San Mateo County. Additional notices of availability were distributed and published on May 29, 2013, to announce the extended public review period.

On April 10, 2013, copies of the DEIR were mailed or otherwise delivered to a list of persons requesting it, to those noted on the distribution list in the DEIR, to adjacent property owners, and to government agencies, the latter both directly and through the State Clearinghouse. The DEIR was posted on the

Department's website. A Notice of Completion was filed with the State Secretary of Resources via the State Clearinghouse on April 10, 2013.

The Planning Commission held a duly-advertised public hearing on the DEIR to accept written or oral comments on May 16, 2013. The Planning Department also held a local public hearing in the project vicinity in San Mateo County on May 14, 2013. The public hearing transcripts are in the Project record. The extended period for acceptance of written comments ended on June 11, 2013.

The Department prepared responses to comments on environmental issues received at the public hearing and in writing during the extended 62 day public review period for the DEIR, and prepared revisions to the text of the DEIR in response to comments received or based on additional information that became available during the public review period. The Department provided additional, updated information and clarification on issues raised by commenters, as well as the staffs of the SFPUC and the Planning Department, to address Project updates since publication of the DEIR. This material was presented in a Responses to Comments document ("RTC"), published on July 9, 2014, distributed to the Commission on July 10, 2014, and all parties who commented on the DEIR, and made available to others upon request at the Department and on the Department's website.

On August 7, 2014, the Planning Commission (hereinafter "Commission") conducted a public hearing on the Final Environmental Impact Report ("EIR") for the Project, consisting of the Draft Environmental Impact Report, the RTC, and any additional consultations, comments and information received during the review process. The Commission reviewed and considered the Final EIR and found the contents of said report and the procedures through which the EIR was prepared, publicized and reviewed complied with the California Environmental Quality Act (Public Resources Code section 21000 *et seq.*) ("CEQA"), the CEQA Guidelines (14 Cal. Code Reg. section 15000 *et seq.*), and Chapter 31 of the San Francisco Administrative Code.

The Planning Commission found the Final EIR was adequate, accurate and objective, reflected the independent analysis and judgment of the Department and the Planning Commission, and that the summary of comments and responses contained no significant revisions to the Draft EIR, and approved the Final EIR for the Project in compliance with CEQA, the CEQA Guidelines and Chapter 31.

The Planning Department, Jonas P. Ionin, is the custodian of records for the Planning Department materials, located in the File for Case No. 2008,1396E, at 1650 Mission Street, Fourth Floor, San Francisco, California.

Department staff prepared a Mitigation Monitoring and Reporting Program ("MMRP") for the Project and these materials were made available to the public and this Commission for this Commission's review, consideration and action.

On August 7, 2014, the Planning Commission conducted a duly noticed public hearing at a regularly scheduled meeting on Case No. 2008.1396E to consider the approval of the Project. The Commission has heard and considered the testimony presented to it at the public hearing and has further considered

written materials and oral testimony presented on behalf of the SFPUC, the Planning Department staff, and other interested parties.

MOVED, that the Planning Commission hereby adopts findings under the California Environmental Quality Act, including rejecting alternatives as infeasible and adopting a Statement of Overriding Considerations, and adopts the MMRP attached as Exhibit 1 based on the following findings:

FINDINGS

Having reviewed the materials identified in the Preamble above, and having heard all testimony and arguments, this Commission finds, concludes, and determines as follows:

In determining to approve the Regional Groundwater Storage and Recovery Project ("GSR Project" or "Project") described in Section I.A, Project Description, below, the San Francisco Planning Commission ("Planning Commission" or "Commission") makes and adopts the following findings of fact and decisions regarding mitigation measures and alternatives, and adopts the statement of overriding considerations, based on substantial evidence in the whole record of this proceeding and under the California Environmental Quality Act ("CEQA"), California Public Resources Code Sections 21000 et seq., particularly Sections 21081 and 21081.5, the Guidelines for Implementation of CEQA ("CEQA Guidelines"), 14 California Code of Regulations Sections 15000 et seq., particularly Sections 15091 through 15093, and Chapter 31 of the San Francisco Administrative Code.

This document is organized as follows:

Section I provides a description of the Project proposed for adoption, the environmental review process for the Project (Regional Groundwater Storage and Recovery Project Environmental Impact Report, Planning Department Case No., 2008.1396E, State Clearinghouse No. 2009062096 (the "Final EIR" or "EIR")), the approval actions to be taken and the location of records;

Section II identifies the impacts found not to be significant that do not require mitigation;

Section III identifies potentially significant impacts that can be avoided or reduced to less-than-significant levels through mitigation and describes the disposition of the mitigation measures;

Section IV identifies significant impacts that cannot be avoided or reduced to less-than-significant levels and describes any applicable mitigation measures as well as the disposition of the mitigation measures;

Section V evaluates the different Project alternatives and the economic, legal, social, technological and other considerations that support approval of the project and the rejection of alternatives, or elements thereof, analyzed; and

Section VI presents a statement of overriding considerations setting forth specific reasons in support of the Commission's actions and rejection of the alternatives not incorporated into the Project.

The Mitigation Monitoring and Reporting Program ("MMRP") for the mitigation measures that have been proposed for adoption is attached with these findings as **Exhibit 1 to this Motion**. The MMRP is required by CEQA Section 21081.6 and CEQA Guidelines Section 15091. Exhibit 1 provides a table setting forth each mitigation measure listed in the Final Environmental Impact Report for the Project ("Final EIR") that is required to reduce or avoid a significant adverse impact. Exhibit 1 also specifies the agency responsible for implementation of each measure and establishes monitoring actions and a monitoring schedule. The full text of the mitigation measures is set forth in Exhibit 1.

These findings are based upon substantial evidence in the entire record before the Commission. The references set forth in these findings to certain pages or sections of the Draft Environmental Impact Report ("Draft EIR" or "DEIR") or the Comments and Responses document ("C&R") in the Final EIR are for ease of reference and are not intended to provide an exhaustive list of the evidence relied upon for these findings.

I. Approval of the Project

A. Project Description

By this action, the Commission adopts and implements the GSR Project identified in the Final EIR. The GSR Project as adopted by the Commission is described in detail in the Draft EIR at pages 3-4 through 3-122. Clarifications regarding the GSR Project description are contained in the C&R in Section 9.5.3. A summary of the key components of the GSR Project follows.

The GSR is a groundwater storage and recovery project located in northern San Mateo County that the San Francisco Public Utilities Commission ("SFPUC") proposes to operate in conjunction with Daly City, San Bruno and CalWater (referred to as the "Partner Agencies"). The SFPUC supplies surface water to the Partner Agencies from its regional water system. The Partner Agencies currently supply potable water to their retail customers through a combination of groundwater from the southern portion of the Westside Groundwater Basin (referred to as the "South Westside Groundwater Basin") and purchased SFPUC surface water. Under the Project, SFPUC would provide supplemental SFPUC surface water to the Partner Agencies during normal and wet years and in turn the Partner Agencies would reduce their groundwater pumping for the purpose of allowing the amount of groundwater in the South Westside Groundwater Basin to recharge. Then, during dry years, the Partner Agencies and the SFPUC would pump the increased stored groundwater using 16 new well facilities. The dry-year groundwater supply would be blended with water from the SFPUC's regional water system and would as a result increase the available water supply to all regional water system customers during dry years.

The SFPUC would construct the following facilities to implement the Project.

The SFPUC would construct 16 new groundwater well facilities within the South Westside Groundwater Basin. The well facilities would be selected from 19 possible locations; the three additional locations would serve as backup locations in the event one of the 16 preferred locations is determined to be

infeasible. Together, the 16 new wells facilities would have an annual average pumping capacity of 7.2 million gallons per day (“mgd”), equivalent to 8,100 acre-feet (“af”) per year.

Each of the well facilities would consist of a groundwater well pump station, distribution piping and utility connections. Depending on the site and quality of the groundwater at the site, the well facility would be located: (1) in a fenced enclosure (most also would provide onsite disinfection); (2) within a building; (3) in a building with an additional treatment facility; or (4) in a building with an additional treatment and filtration facility. Two sites may have just a well facility in a fenced enclosure and rely on a consolidated treatment and filtration facility at another location, or may have their own treatment and filtration facilities. The 19 possible sites, depending on whether the consolidated treatment and filtration facility is feasible, consist of four to six sites with a well facility in a fenced enclosure; one site with a well facility in a 700 square foot building; five sites with a well and treatment facility in an approximately 1,500 square foot structure; and seven to nine sites with a well and treatment plus filtration facility in an approximately 2,000 to 3,000 square foot structure. The Project also would upgrade the existing Daly City Westlake pump station by adding three booster pumps and disinfection and fluoridation treatment so that it could serve proposed Sites 2, 3 and 4.

The SFPUC would operate the facilities in conjunction with the Partner Agencies through an Operating Agreement. The proposed Operating Agreement provides for the Partner Agencies to accept surface water deliveries from the SFPUC during normal and wet years of up to 5.52 mgd in lieu of pumping a like amount of groundwater from their existing facilities. Then in dry years, the Partner Agencies would pump from their existing wells and any new wells to designated quantities totaling 6.9 mgd over a five-year averaging period. The SFPUC also would pump from the Project wells during dry years. SFPUC pumping for dry year regional water system supply could last for up to 7.5 years.

The SFPUC would establish an SFPUC Storage Account to maintain an accounting of actual amounts of in-lieu water stored, taking into account in-lieu deliveries, metered decreases to groundwater pumping, and losses from the South Westside Groundwater Basin resulting from the Project. The expected maximum increased storage volume that the Project is expected to achieve in the South Westside Groundwater Basin is 60,500 af. The accounting process would assure that only the in-lieu water actually stored is pumped. When the SFPUC Storage Account is full, with the full 60,500 af in storage, and there is no shortage requiring the SFPUC to pump groundwater from the Project wells, pumping by Partner Agencies could not exceed 7.6 mgd in any year of the five-year averaging period under the terms of the proposed Operating Agreement.

The SFPUC also could undertake pumping during emergencies, system rehabilitation, scheduled maintenance or malfunctioning of the water system, and upon a recommendation of the operating committee established by the Operating Agreement for purposes of management of the South Westside Groundwater Basin.

B. Project Objectives

The SFPUC's primary goal of the Project is to provide an additional dry-year water supply. Specific objectives of the GSR Project are:

- Conjunctively manage the South Westside Groundwater Basin through the coordinated use of SFPUC surface water and groundwater pumped by the Partner Agencies.
- Provide supplemental SFPUC surface water to the Partner Agencies in normal and wet years, with a corresponding reduction of groundwater pumping by these agencies, which then allows for in-lieu recharge of the South Westside Groundwater Basin.
- Increase the dry-year and emergency pumping capacity of the South Westside Groundwater Basin by an average annual 7.2 mgd.
- Provide a new dry-year groundwater supply for the SFPUC's customers and increase water supply reliability during the 8.5-year design drought cycle.

In addition, the Project is part of the SFPUC's adopted Water System Improvement Program ("WSIP") adopted by the SFPUC on October 30, 2008 (see Section C.1). The WSIP consists of over 70 local and regional facility improvement projects that would increase the ability of the SFPUC's water supply system to withstand major seismic events and prolonged droughts and to meet estimated water-purchase requests in the service areas. With the exception of the water supply goal, the overall WSIP goals and objectives are based on a planning horizon through 2030. The water supply goal to meet delivery needs in the SFPUC service area is based on a planning horizon through 2018. The overall goals of the WSIP for the SFPUC's regional water system are to:

- Maintain high-quality water.
- Reduce vulnerability to earthquakes.
- Increase water delivery reliability.
- Meet customer water supply needs.
- Enhance sustainability.
- Achieve a cost-effective, fully operational system.

The Project would help meet the SFPUC's WSIP goals by providing dry-year supply to increase water delivery reliability and meet customer water supply needs. In addition, the Project would provide increased regional operational flexibility to respond to and restore water service during unplanned outages and loss of a water source, or both. Without the Project, the SFPUC could not meet its goals for dry-year delivery reliability.

C. Environmental Review

1. Water System Improvement Program Environmental Impact Report

On October 30, 2008, the SFPUC approved the Water System Improvement Program (also known as the “Phased WSIP”) with the objective of repairing, replacing, and seismically upgrading its regional water supply system’s aging pipelines, tunnels, reservoirs, pump stations, and storage tanks (SFPUC, 2008; SFPUC Resolution No. 08-0200). The WSIP improvements span seven counties—Tuolumne, Stanislaus, San Joaquin, Alameda, Santa Clara, San Mateo, and San Francisco (see SFPUC Resolution No. 08-0200).

To address the potential environmental effects of the WSIP, the San Francisco Planning Department (“Planning Department”) prepared a Program EIR (“PEIR”), which the Planning Commission certified on October 30, 2008 (Motion No. 17734). At a project-level of detail, the PEIR evaluated the environmental impacts of the WSIP's water supply strategy and, at a program level of detail, it evaluated the environmental impacts of the WSIP's facility improvement projects. The PEIR contemplated that additional project-level environmental review would be conducted for the facility improvement projects, including the Regional Groundwater Storage and Recovery Project.

2. San Francisco Regional Groundwater Storage and Recovery Project Environmental Impact Report

In accordance with Sections 15063 and 15082 of the CEQA Guidelines, the Environmental Planning (“EP”) staff of the Planning Department, as lead agency, prepared a Notice of Preparation (“NOP”) and conducted a scoping meeting for the GSR Project EIR. The Planning Department released the NOP on June 24, 2009; held a public scoping meeting on July 9, 2009, at the South San Francisco Municipal Services Building in South San Francisco; and accepted written comments on the NOP through July 28, 2009.

The NOP was distributed to the State Clearinghouse, and notices of the availability of the NOP were mailed to approximately 1,500 interested parties, including property owners and tenants within 300 feet of the proposed Project and 32 public agencies. The scoping meeting was noticed in local newspapers. Approximately 33 people attended the meeting.

The Planning Department received six verbal comments on the scope of the EIR at the scoping meeting and 18 state, regional, and local agencies; organizations; and individual submitted written comments. A *Scoping Summary Memorandum* is included in the EIR at Appendix B summarizing comments received.

The Planning Department then prepared the Draft EIR, which described the Project and the environmental setting, identified potential impacts, presented mitigation measures for impacts found to be significant or potentially significant, and evaluated Project alternatives. The Draft EIR analyzed the impacts associated with each of the key components of the Project, and identified mitigation measures applicable to reduce impacts found to be significant or potentially significant for each key component. It also included an analysis of five alternatives to the Project. In assessing construction and operational impacts of the Project, the Draft EIR considered the impacts of the Project as well as the cumulative impacts associated with the proposed Project in combination with other past, present, and future actions that could affect the same resources.

Each environmental issue presented in the Draft EIR was analyzed with respect to significance criteria that are based on EP guidance regarding the environmental effects to be considered significant. EP guidance is, in turn, based on CEQA Guidelines Appendix G, with some modifications.

The Draft EIR was circulated to local, state, and federal agencies and to interested organizations and individuals for review and comment on April 10, 2013 for a 62-day public review period, which closed at 5:00 p.m. on June 11, 2013. A public hearing on the Draft EIR to accept written or oral comments was held by EP at the South San Francisco Municipal Services Building in South San Francisco on May 14, 2013. Also, the Planning Commission held a public hearing at its meeting at San Francisco City Hall on May 16, 2013. During the public review period, EP received written comments sent through the mail, fax, or email. A court reporter was present at the public hearings, transcribed the public hearing verbatim, and prepared written transcripts.

EP then prepared the C&R document, which provided written responses to each comment received on the Draft EIR. The C&R document was published on July 9, 2014, and included copies of all of the comments received on the Draft EIR and individual responses to those comments. The C&R provided additional, updated information and clarification on issues raised by commenters, as well as SFPUC and Planning Department staff-initiated text changes to address project updates. The Planning Commission reviewed and considered the Final EIR, which includes the Draft EIR and the C&R document, and all of the supporting information. The Final EIR provided augmented and updated information on many issues presented in the Draft EIR, including (but not limited to) the following topics: project description, plans and policies, land use, aesthetics, cultural and paleontological resources, transportation and circulation, noise and vibration, greenhouse gas emissions, recreation, utilities and service systems, hydrology and water quality, cumulative projects, and Project alternatives. This augmentation and update of information in the Draft EIR did not constitute new information or significantly alter any of the conclusions of the Draft EIR so as to trigger the need for recirculation of the Final EIR.

In certifying the Final EIR, the Planning Commission has determined that none of the factors are present that would necessitate recirculation of the Final EIR under CEQA Guidelines Section 15088.5. The Final EIR contains no information revealing (1) any new significant environmental impact that would result from the Project or from a new mitigation measure proposed to be implemented, (2) any substantial increase in the severity of a previously identified environmental impact, (3) any feasible Project alternative or mitigation measure considerably different from others previously analyzed that would clearly lessen the environmental impacts of the Project, but that was rejected by the Project's proponents, or (4) that the Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

The Commission finds that the Project is within the scope of the project analyzed in the Final EIR and the Final EIR fully analyzed the Project proposed for approval. No new impacts have been identified that were not analyzed in the Final EIR.

D. Approval Actions

Under San Francisco's Administrative Code Chapter 31 procedures, the San Francisco Planning Commission certifies the Final EIR as complete and all approving bodies subject to CEQA adopt CEQA findings at the time of the approval actions. Anticipated approval actions are listed below.

1. San Francisco Planning Commission

- Approves General Plan consistency findings.

2. San Francisco Public Utilities Commission

- Approves the project, as described in these findings, and authorizes the General Manager or his designee to obtain necessary permits, consents, agreements and approvals. Approvals include, but are not limited to, awarding a construction contract, approving the Operating Agreement with the Partner Agencies, approving agreements with irrigators for groundwater well monitoring and mitigation and related agreements with the SFPUC's wholesale customers and CalWater regarding delivery of water from SFPUC's regional system as an interim mitigation action; and approving property rights acquisition and access agreements.

3. San Francisco Board of Supervisors

- Considers any appeal of the Planning Commission's certification of the Final EIR.
- Approves an allocation of bond monies to pay for implementation of the project.
- Approves property rights acquisition agreements.

4. San Francisco Arts Commission

- Approves the exterior design of structures on City property.

5. San Francisco Historic Preservation Commission

- Reviews Memorandum of Understanding under federal Section 106 process of National Historic Preservation Act.

6. Other – Federal, State, and Local Agencies

Implementation of the Project will involve consultation with or required approvals by other local, state, and federal regulatory agencies as listed below.

- **Federal Agencies.** Approvals by the United States Department of Veterans Affairs ("VA") for installation and maintenance of well facilities at Sites 14 and 15; approval to demolish a building located adjacent to the SFPUC right-of-way and decommission pipelines; and Section 106 consultation for review and evaluation of project impacts on cultural resources

under the National Historic Preservation Act. The VA's approvals will be subject to separate environmental review under the National Environmental Policy Act.

- **State and Regional Agencies.** Approvals of state and regional agencies related to: water supply permits (California Department of Public Health, Drinking Water Field Operations Branch); waste discharge permits (Bay Area Regional Water Quality Control Board ("RWQCB")); stormwater management permits (State Water Resources Control Board ("SWRCB")); concurrence of compliance with Section 106 of the National Historic Preservation Act (State Historic Preservation Officer); permits for stationary equipment operation (Bay Area Air Quality Management District); biological resource management approvals (California Department of Fish and Wildlife ("CDFW")); and encroachment permits and land acquisitions (California Department of Transportation ("Caltrans") and Bay Area Rapid Transit District).
- **Local Agencies.** Approvals by local agencies, including the Operating Agreement with the Partner Agencies; easements and land acquisition agreements; encroachment permits for work on land owned by local agencies; permits for groundwater wells; and approvals related to implementation of mitigation measures, including without limitation, agreements with SFPUC wholesale customers regarding delivery of water from SFPUC's regional system as an interim mitigation action. Local approving agencies, in addition to SFPUC wholesale customers, include: San Mateo County Transit District ("SamTrans"); Jefferson Elementary School District; San Mateo County; Town of Colma; and cities of Daly City, Millbrae, San Bruno and South San Francisco.

To the extent that the identified mitigation measures require consultation or approval by these other agencies, this Commission urges these agencies to assist in implementing, coordinating, or approving the mitigation measures, as appropriate to the particular measure.

E. Contents and Location of Records

The record upon which all findings and determinations related to the Project are based ("Record of Proceedings") includes the following:

- The Draft EIR and all documents referenced in or relied upon by the EIR. (The references in these findings to the EIR or Final EIR include both the Draft EIR and the Comments and Responses document.)
- The PEIR for the Phased WSIP Variant, which is incorporated by reference in the GSR Project EIR.
- All information (including written evidence and testimony) provided by City staff to the SFPUC and Planning Commission relating to the EIR, the Project, and the alternatives set forth in the EIR.

- All information (including written evidence and testimony) presented to the SFPUC and the Planning Commission by the environmental consultant and sub-consultants who prepared the EIR or that was incorporated into reports presented to the SFPUC.
- All information presented at any public hearing or workshop related to the Project and the EIR.
- The Mitigation Monitoring and Reporting Program.
- All other documents available to the SFPUC and the public, comprising the administrative record pursuant to Public Resources Code Section 21167.6(e).

The Commission has relied on all of the information listed above in reaching its decision on the Project, even if not every document was formally presented to the Commission. Without exception, these documents fall into one of two categories. Many documents reflect prior planning or legislative decisions that the Commission was aware of in approving the Project. Other documents influenced the expert advice provided to Planning Department staff or consultants, who then provided advice to the Commission. For these reasons, such documents form part of the underlying factual basis for the Commission's decision relating to the adoption of the Project.

The public hearing transcript, a copy of all letters regarding the Draft EIR received during the public review period, the administrative record, background documentation for the Final EIR, and material related to the Planning Commission's approval of the Project, including these findings, are available at the San Francisco Planning Department, 1650 Mission Street, San Francisco. **Jonas P. Ionin**, Commission Secretary, is the Custodian of Records for the Planning Department. Materials concerning the SFPUC's approval of the Project and additional information concerning the adoption of these findings are contained in SFPUC files, **SFPUC Project No. CUW30103** in the Bureau of Environmental Management, San Francisco Public Utilities Commission, 525 Golden Gate Avenue, San Francisco, California 94102. The Custodian of Records is **Kelley Capone**. All files have been available to the Commission and the public for review in considering these findings and whether to approve the Project.

F. Findings about Significant Environmental Impacts and Mitigation Measures

The following Sections II, III, and IV set forth the Commission's findings about the Final EIR's determinations regarding significant environmental impacts and the mitigation measures proposed to address them. These findings provide the written analysis and conclusions of the Commission regarding the environmental impacts of the Project and the mitigation measures included as part of the Final EIR and adopted by the Commission as part of the Project. To avoid duplication and redundancy, and because the Commission agrees with, and hereby adopts, the conclusions in the Final EIR, these findings will not repeat the analysis and conclusions in the Final EIR but instead incorporate them by reference and rely upon them as substantial evidence supporting these findings.

In making these findings, the Commission has considered the opinions of staff and experts, other agencies, and members of the public. The Commission finds that (i) the determination of significance thresholds is a judgment decision within the discretion of the City and County of San Francisco; (ii) the significance thresholds used in the EIR are supported by substantial evidence in the record, including the expert opinion of the EIR preparers and City staff; and (iii) the significance thresholds used in the EIR provide reasonable and appropriate means of assessing the significance of the adverse environmental effects of the Project. Thus, although, as a legal matter, the Commission is not bound by the significance determinations in the EIR (see Public Resources Code, Section 21082.2, subdivision (e)), the Commission finds them persuasive and hereby adopts them as its own.

These findings do not attempt to describe the full analysis of each environmental impact contained in the Final EIR. Instead, a full explanation of these environmental findings and conclusions can be found in the Final EIR, and these findings hereby incorporate by reference the discussion and analysis in the Final EIR supporting the determination regarding the project impact and mitigation measures designed to address those impacts. In making these findings, the Commission ratifies, adopts and incorporates in these findings the determinations and conclusions of the Final EIR relating to environmental impacts and mitigation measures, except to the extent any such determinations and conclusions are specifically and expressly modified by these findings.

As set forth below, the Commission adopts and incorporates all of the mitigation measures set forth in the Final EIR and the attached MMRP to substantially lessen or avoid the potentially significant and significant impacts of the Project. The Commission intends to adopt each of the mitigation measures proposed in the Final EIR. Accordingly, in the event a mitigation measure recommended in the Final EIR has inadvertently been omitted in these findings or the MMRP, such mitigation measure is hereby adopted and incorporated in the findings below by reference. In addition, in the event the language describing a mitigation measure set forth in these findings or the MMRP fails to accurately reflect the mitigation measures in the Final EIR due to a clerical error, the language of the policies and implementation measures as set forth in the Final EIR shall control. The impact numbers and mitigation measure numbers used in these findings reflect the information contained in the Final EIR.

In Sections II, III and IV below, the same findings are made for a category of environmental impacts and mitigation measures. Rather than repeat the identical finding dozens of times to address each and every significant effect and mitigation measure, the initial finding obviates the need for such repetition because in no instance is the Commission rejecting the conclusions of the Final EIR or the mitigation measures recommended in the Final EIR for the Project.

II. Impacts Found Not To Be Significant and Thus Do Not Require Mitigation

Under CEQA, no mitigation measures are required for impacts that are less than significant (Public Resources Code, Section 21002; CEQA Guidelines, Sections 15126.4, subdivision (a)(3), 15091). Based on the evidence in the whole record of this proceeding, the Commission finds that the implementation of the Project will result in no impacts in the following areas: project-level impacts to population and

housing¹; wind and shadow; public services; and agriculture and forest resources. These subjects are not further discussed in these findings. The Commission further finds that implementation of the Project will not result in any significant impacts in the following areas and that these less-than-significant impacts, therefore, do not require mitigation.

Aesthetics

- **Impact AE-2:** Project construction would not create a new source of substantial light that would adversely affect day or nighttime views in the area. (DEIR Section 5.3.3.4, Pages 5.3-76 to 5.3-78)
- **Impact AE-4:** Project operation would not create a new source of substantial light that would adversely affect day or nighttime views in the area. (DEIR Section 5.3.3.5, Pages 5.3-101 to 5.3-102)

Transportation and Circulation

- **Impact TR-4:** Project operations and maintenance activities would not conflict with an applicable plan or policies regarding performance of the transportation system or alternative modes of transportation. (DEIR Section 5.6.3.5, Pages 5.6-58 to 5.6-60)

Noise and Vibration

- **Impact NO-4:** Project construction would not result in a substantial temporary increase in ambient noise levels along construction haul routes. (DEIR Section 5.7.3.4, Pages 5.7-82 to 5.7-83)

Air Quality

- **Impact AQ-1:** Construction of the Project would not conflict with or obstruct implementation of applicable air quality plans. (DEIR Section 5.8.3.4, Page 5.8-23)
- **Impact AQ-4:** Project construction activities would not create objectionable odors affecting a substantial number of people. (DEIR Section 5.8.3.4, Page 5.8-29)
- **Impact AQ-5:** Project operations would not violate air quality standards or contribute substantially to an existing air quality violation. (DEIR Section 5.3.8.5, Page 5.8-29)
- **Impact AQ-6:** Project operations would not expose sensitive receptors to substantial pollutant concentrations. (DEIR Section 5.8.3.5, Page 5.8-30)
- **Impact AQ-7:** Project operations would not create objectionable odors affecting a substantial number of people. (DEIR Section 5.8.3.5, Page 5.8-30)

Greenhouse Gas Emissions

¹ As part of the WSIP, the Project would contribute to the growth-inducing impacts considered in the WSIP PEIR. See Section IV.B of these Findings.

- **Impact GG-1:** Project construction would generate GHG emissions, but not at levels that would have a significant impact on the environment. (DEIR Section 5.9.3.4, Pages 5.9-8 to 5.9-9)
- **Impact GG-2:** Project operations would generate GHG emissions, but not at levels that would result in a significant impact on the environment. (DEIR Section 5.9.3.4, Page 5.9-10)
- **Impact C-GG:** The proposed Project would not result in a cumulatively considerable contribution to GHG emissions. (DEIR Section 5.9.3.4, Page 5.9-11)

Recreation

- **Impact RE-1:** The Project would not remove or damage existing recreational resources during construction. (DEIR Section 5.11.3.4, Pages 5.11-15 to 5.11-17)
- **Impact RE-3:** The Project would not impair access to recreational resources during construction. (DEIR Section 5.11.3.4, Pages 5.11-25 to 5.11-27)
- **Impact RE-4:** The Project would not damage recreational resources during operation. (DEIR Section 5.11.3.5, Pages 5.11-27 to 5.11-28)
- **Impact RE-5:** The Project would not deteriorate the quality of the recreational experience during operation. (DEIR Section 5.11.3.5, Pages 5.11-28 to 5.11-31)
- **Impact RE-6:** Operation of the Project would not remove or damage recreational resources, impair access to, or deteriorate the quality of the recreational experience at Lake Merced. (DEIR Section 5.11.3.5, Pages 5.11-31 to 5.11-34)
- **Impact C-RE-1:** Construction and operation of the proposed Project would not result in significant cumulative impacts on recreational resources. (DEIR Section 5.11.3.6, Pages 5.11-34 to 5.11-37)
- **Impact C-RE-2:** Operation of the Project would not result in significant cumulative impacts on recreational resources at Lake Merced. (DEIR Section 5.11.3.6, Pages 5.11-38 to 5.11-40)

Utilities and Service Systems

- **Impact UT-2:** Project construction would not exceed the capacity of wastewater treatment facilities, exceed wastewater treatment requirements, require or result in the construction of new or expansion of existing wastewater treatment facilities or stormwater drainage facilities, the construction of which could cause significant environmental effects. (DEIR Section 5.12.3.4, Pages 5.12-14 to 5.12-16)
- **Impact UT-3:** Project construction would not result in adverse effects on solid waste landfill capacity. (DEIR Section 5.12.3.4, Pages 5.12-16 to 5.12-17)
- **Impact UT-5:** Project operation would not exceed the capacity of wastewater treatment facilities, exceed wastewater treatment requirements, or require or result in the construction of new, or expansion of existing, wastewater treatment facilities or stormwater drainage

facilities, the construction of which could cause significant environmental effects. (DEIR Section 5.12.3.5, Pages 5.12-19 to 5.12-20)

Biological Resources

- **Impact BI-6:** Operation of the Project would not adversely affect species identified as candidate, sensitive, or special-status wildlife species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. (DEIR Section 5.14.3.6, Pages 5.14-84 to 5.14-85)

Geology and Soils

- **Impact GE-1:** The Project would not be located on a geologic unit or soil that is unstable, or that would become unstable during construction. (DEIR Section 5.15.3.4, Page 5.15-19)
- **Impact GE-2:** The Project would not substantially change the topography or any unique geologic or physical features of the site(s). (DEIR Section 5.15.3.4, Page 5.15-20)
- **Impact GE-5:** The Project would not be located on corrosive or expansive soil, creating substantial risks to life or property. (DEIR Section 5.15.3.5, Pages 5.15-25 to 5.15-26)
- **Impact C-GE-1:** Construction and operation of the proposed Project could result in significant impacts related to soils and geology. (DEIR Section 5.15.3.6, Page 5.15-26)

Hydrology and Water Quality

- **Impact HY-3:** Project operation would not alter drainage patterns in such a manner that could result in degraded water quality or cause on- or off-site flooding. (DEIR Section 5.16.3.6, Pages 5.16-69 to 5.16-70)
- **Impact HY-4:** Project operation would not impede or redirect flood flows. (DEIR Section 5.16.3.6, Pages 5.16-70 to 5.16-71)
- **Impact HY-5:** Project operation would not result in a violation of water quality standards or in the degradation of water quality from the discharge of groundwater during well maintenance. (DEIR Section 5.16.3.6, Pages 5.16-71 to 5.16-72)
- **Impact HY-7:** Project operation would not result in substantial land subsidence due to decreased groundwater levels in the Westside Groundwater Basin where the historical low water levels are exceeded. (DEIR Section 5.16.3.7, Pages 5.16-100 to 5.16-105)
- **Impact HY-8:** Project operation would not result in seawater intrusion due to decreased groundwater levels in the Westside Groundwater Basin. (DEIR Section 5.16.3.7, Pages 5.16-105 to 5.16-113)
- **Impact HY-10:** Project operation would not have a substantial adverse effect on water quality that could affect the beneficial uses of Pine Lake. (DEIR Section 5.16.3.7, Pages 5.16-127 to 5.16-128)

- **Impact HY-11:** Project operation would not have a substantial adverse effect on water quality that could affect the beneficial uses of Colma Creek, San Bruno Creek, Lomita Channel, or Millbrae Creek. (DEIR Section 5.16.3.7, Page 5.16-128)
- **Impact HY-12:** Project operation would not cause a violation of water quality standards due to mobilization of contaminants in groundwater from changing groundwater levels in the Westside Groundwater Basin. (DEIR Section 5.16.3.7, Pages 5.16-128 to 5.16-139)
- **Impact HY-13:** Project operation would not result in degradation of drinking water quality or groundwater quality relative to constituents for which standards do not exist. (DEIR Section 5.16.3.7, Pages 5.16-140 to 5.16-142)
- **Impact C-HY-3:** Operation of the proposed Project would not result in a cumulatively considerable contribution to cumulative impacts related to subsidence. (DEIR 5.16.3.8, Pages 5.16-152 to 5.16-153)
- **Impact C-HY-4:** Operation of the proposed Project would not have a cumulatively considerable contribution to seawater intrusion. (DEIR Section 5.16.3.8, Pages 5.16-153 to 5.16-156)
- **Impact C-HY-6:** Operation of the proposed Project would not result in a cumulatively considerable contribution to cumulative impacts related to water quality standards. (DEIR Section 5.16.3.8, Pages 5.16-159 to 5.16-160)
- **Impact C-HY-7:** Operation of the proposed Project would not result in a cumulatively considerable contribution to cumulative impacts related to water quality degradation. (DEIR Section 5.16.3.8, Pages 5.16-160 to 5.16-161)

Hazards and Hazardous Materials

- **Impact HZ-1:** The Project would not create a significant hazard to the public or the environment related to transport, use, or disposal of hazardous materials during construction. (DEIR Section 5.17.3.4, Page 5.17-27)
- **Impact HZ-4:** The Project would not create a hazard to the public or environment from the routine transport, use, or disposal of hazardous materials or accidental release of hazardous materials during operation. (DEIR Section 5.17.3.5, Pages 5.17-36 to 5.17-38)
- **Impact HZ-5:** The Project would not result in impacts from the emission or use of hazardous materials within 0.25 mile of a school during operation. (DEIR Section 5.17.3.5, Pages 5.17-38 to 5.17-39)
- **Impact HZ-6:** The Project would not result in a safety hazard for people residing or working in the vicinity of a public use airport. (DEIR Section 5.17.3.5, Page 5.17-39)
- **Impact HZ-7:** The Project would not expose people or structures to a significant risk of loss, injury, or death involving fires. (DEIR Section 5.17.3.5, Pages 5.17-39 to 5.17-40)

Mineral and Energy Resources

- **Impact ME-1:** The Project would not encourage activities that result in the use of large amounts of fuel and energy in a wasteful manner during construction. (DEIR Section 5.18.3.4, Page 5.18-8)
- **Impact ME-2:** The Project would not encourage activities that result in the use of large amounts of fuel and energy in a wasteful manner during operation. (DEIR Section 5.18.3.5, Pages 5.18-8 to 5.18-11)
- **Impact C-ME:** Construction and operation of the proposed Project would not result in a cumulatively considerable contribution to cumulative impacts related to mineral and energy resources. (DEIR Section 5.18.3.6, Pages 5.18-11 to 5.18-12)

III. Findings of Potentially Significant or Significant Impacts That Can Be Avoided or Reduced to a Less-Than-Significant Level through Mitigation and the Disposition of the Mitigation Measures

CEQA requires agencies to adopt mitigation measures that would avoid or substantially lessen a project's identified significant impacts or potentially significant impacts if such measures are feasible (unless mitigation to such levels is achieved through adoption of a project alternative). The findings in this Section III and in Section IV concern mitigation measures set forth in the EIR. These findings discuss mitigation measures as proposed in the EIR and recommended for adoption by the City and other implementing agencies, which the City and other implementing agencies can implement. The mitigation measures proposed for adoption in this section and referenced following each Project impact discussed in this Section III, are the same as the mitigation measures identified in the Final EIR for the project. The full explanation of potentially significant environmental impacts is contained in Chapters 5 and 9 (Section 9.3) of the Final EIR and in text changes to Chapter 5 in Chapter 9 (Section 9.5) of the Final EIR. The full text of each mitigation measure listed in this section is contained in the Final EIR and in **Exhibit 1, the MMRP**. Exhibit 1 identifies the SFPUC as the agency responsible for the implementation of all mitigation measures and establishes monitoring actions and a monitoring schedule. The Commission finds that the SFPUC through its design, construction and implementation of the Project can and should implement all of the mitigation measures. The Commission urges the SFPUC to adopt and implement all of the mitigation measures.

This Commission recognizes that some of the mitigation measures as explained below are partially within the jurisdiction of other agencies besides the City, including the VA; CDFW; SWRCB, RWQCB, Caltrans, SamTrans, San Mateo County, the Town of Colma, the cities of Daly City, Millbrae, San Bruno, and South San Francisco; and SamTrans. The Commission urges these remaining agencies to assist in implementing these mitigation measures, and finds that these agencies can and should participate in implementing these mitigation measures.

The Planning Commission hereby adopts all of the mitigation measures proposed for the Project and finds that the Planning Department will assist with the implementation of the mitigation measures partially within its jurisdiction: **Mitigation Measure M-CR-2: Discovery of Archaeological Resources; Mitigation Measure M-CR-3: Suspend Construction Work if a Paleontological Resource is Identified; Mitigation Measure M-CR-4: Accidental Discovery of Human Remains; and Mitigation Measure M-**

HY-6: Ensure Irrigators' Wells Are Not Prevented from Supporting Existing or Planned Land Use(s) Due to Project Operation.

The Commission finds that all of the mitigation measures are appropriate and feasible and that changes or alterations will be required in, or incorporated into, the Project that mitigate or avoid the significant environmental effects as identified in the Final EIR. The Commission finds that for the reasons set forth in the Final EIR and elsewhere in the record, the impacts identified in this section would be reduced to a *less-than-significant* level through implementation of the mitigation measures identified in this section. For each impact identified below, the impact statement for each impact identifies the sites where the impact will be less than significant with the implementation of the listed mitigation measures. The title of the mitigation measure or measures listed after each impact statement follow the approach used in the Final EIR and indicate all sites where the mitigation measure or measures will be implemented as a result of *any* GSR Project impact and not just the sites that will cause the impact listed immediately above. If a site is not listed in the impact statement, either it will have no impact or a less than significant impact for that particular identified impact.

A. Project Impacts

Land Use

- **Impact LU-2:** Project operations would result in substantial long-term or permanent impacts on the existing character or disrupt or displace land uses. (Sites 1, 5, 9, 18, Westlake Pump Station) (DEIR Section 5.2.3.5, Pages 5.2-35 to 5.2-38)

By requiring the design of the facilities to meet a performance standard of 50 dBA Leq, achieved by incorporating into the design such measures as additional sound insulation and weatherstripping, implementation of Mitigation Measure M-NO-5 would reduce noise levels from Project operations to *less-than-significant* levels.

- **Mitigation Measure M-NO-5: Operational Noise Control Measures (Sites 1, 5, 7, 9, 12, 18, Westlake Pump Station)**

Aesthetics

- **Impact AE-3:** Project operation would have a substantial adverse impact on a scenic vista, resource, or on the visual character of a site or its surroundings. (Sites 4, 7, 14, 15, 18) (DEIR Section 5.3.3.5, Pages 5.3-79 to 5.3-99)

Implementation of Mitigation Measures M-AE-3a, M-CR-5a and M-CR-5b would reduce the aesthetic impact of siting well facilities at Sites 4, 7, 14, 15 and 18 to *less-than-significant* levels: Mitigation Measure M-AE-3a would screen views of these well facilities; Mitigation Measure M-CR-5a would require at Site 14 the development of an architectural design compatible with the Golden Gate National Cemetery ("GGNC"); Mitigation Measure M-CR-5b would require at Site 15 the development of a compatible architectural design more closely resembling the existing GGNC maintenance and operations buildings, minimizing the dimensions of the well facility to the extent practicable, moving the structure further away from the auxiliary entrance, and using landscaping that would be in visual harmony with the site's surroundings.

- **Mitigation Measure M-AE-3a: Implement Landscape Screening (Sites 4,7,18)**
- **Mitigation Measure M-CR-5a: Minimize Facilities Siting Impacts on Elements of the Historical Resource at Site 14**
- **Mitigation Measure M-CR-5b: Minimize Facilities Siting Impacts on Elements of the Historical Resource at Site 15**

This Commission recognizes that Mitigation Measures M-CR-5a and M-CR-5b are partially within the jurisdiction of the Veterans Affairs. This Commission urges the Veterans Affairs to assist in implementing these mitigation measures and finds that the Veterans Affairs can and should participate in implementing these mitigation measures.

- **Impact C-AE-1:** Construction and operation of the proposed Project could result in a cumulatively considerable contribution to cumulative impacts related to scenic resources and visual character. (Sites 12 and 13) (DEIR Section 5.3.3.6, Pages 5.3-102 to 5.3-104)

The GSR Project's cumulative contribution to construction-period impacts on the visual quality would be reduced to a *less-than-significant* level with implementation of Mitigation Measures M-AE-1a, M-AE-1b, and M-AE-1c. These mitigation measures would ensure that the construction areas at Sites 12 and 13 are maintained by storing construction materials and equipment generally away from public view, removing construction debris promptly at regular intervals, and minimizing tree removal.

- **Mitigation Measure M-AE-1a: Site Maintenance (Sites 4, 7, 12, 13, 14, 15, 18)**
- **Mitigation Measure M-AE-1b: Tree Protection Measures (Sites 3, 4, 7, 10, 11, 12, 13, 14, 15, 17)**
- **Mitigation Measure M-AE-1c: Develop and Implement a Tree Replanting Plan (Site 12)**

Cultural and Paleontological Resources

- **Impact CR-1:** Project construction could cause an adverse change in the significance of a historical resource. (Sites 14 and 15) (DEIR Section 5.5.3.4, Pages 5.5-48 to 5.5-53)

Implementation of Mitigation Measures M-CR-1a, M-CR-1b, and M-NO-2 would reduce potential construction impacts on the historical resources at Sites 14 and 15 to *less-than-significant* levels by requiring the SFPUC and its contractors to implement physical and administrative measures to protect elements of the historical resources during construction, and by requiring the construction of pipelines within 25 feet of the structures near Site 15 to use either non-vibratory means of compaction or controlled low strength materials (CLSM) as backfill so that compaction is not necessary, thereby reducing significant vibration levels near the building to below the significance threshold of 0.25 in/sec PPV.

- **Mitigation Measure M-CR-1a: Minimize Construction-related Impacts to Elements of the Historical Resource at Site 14**

- **Mitigation Measure M-NO-2: Reduce Vibration Levels during Construction of Pipelines (Sites 3, 4, 12, 15, 18)**
- **Mitigation Measure M-CR-1b: Minimize Construction-related Impacts to Elements of the Historical Resource at Site 15**

This Commission recognizes that Mitigation Measure M-CR-1a is partially within the jurisdiction of the Veterans Affairs. This Commission urges the Veterans Affairs to assist in implementing this mitigation measure and finds that the Veterans Affairs can and should participate in implementing this mitigation measure.

- **Impact CR-2:** Project construction could cause an adverse change in the significance of an archeological resource (All Sites except Westlake Pump Station) (DEIR Section 5.5.3.4, Pages 5.5-53 to 5.5-55)

Implementation of Mitigation Measure M-CR-2 would reduce impacts on any previously unrecorded and buried (or otherwise obscured) archaeological deposits to *less-than-significant* levels by requiring the SFPUC and its contractors to adhere to appropriate procedures and protocols for minimizing such impacts, in the event that a possible archaeological resource is discovered during construction activities associated with the Project.

- **Mitigation Measure M-CR-2: Discovery of Archaeological Resources (All Sites except Westlake Pump Station)**
- **Impact CR-3:** Project construction could result in a substantial adverse effect by destroying a unique paleontological resource or site (All Sites except Westlake Pump Station and Site 9) (DEIR Section 5.5.3.4, Pages 5.5-56 to 5.5-57)

Implementation of Mitigation Measure M-CR-3 would reduce the Project's potential construction-related impacts on paleontological resources to *less-than-significant* level by requiring that construction work be temporarily halted or diverted in the event of a paleontological resource discovery, as well as avoidance or salvage of any significant paleontological resources.

- **Mitigation Measure M-CR-3: Suspend Construction Work if a Paleontological Resource is Identified (All Sites except Westlake Pump Station and Site 9)**
- **Impact CR-4.** Project construction could result in a substantial adverse effect related to the disturbance of human remains. (All Sites except Westlake Pump Station) (DEIR Section 5.5.3.4, Pages 5.5-57 to 5.5-58)

Mitigation Measure M-CR-4 would reduce impacts on buried human remains that may be accidentally discovered during Project construction activities to a *less-than-significant* level by requiring the SFPUC to adhere to appropriate excavation, removal, recordation, analysis, custodianship, and final disposition protocols.

- **Mitigation Measure M-CR-4: Accidental Discovery of Human Remains (All Sites except Westlake Pump Station)**

- **Impact CR-5.** Project facilities could cause an adverse change in the significance of a historical resource. (Sites 14, 15) (DEIR Section 5.5.4, Pages 5.5-58 to 5.5-63)

Implementation of Mitigation Measure M-CR-5a would reduce impacts on historic resources to a *less-than-significant* level at Site 14 by screening the new structure, decreasing its prominence on the existing landscape among the headstones, and allowing for a design compatible with the overall site. Implementation of Mitigation Measures M-CR-5b would reduce impacts on historic resources to a *less-than-significant* level at Site 15 by implementing measures to relocate or redesign Project facilities at the site to be in accordance with the *Secretary of the Interior's Standards for Rehabilitation*.

- **Mitigation Measure M-CR-5a: Minimize Facilities Siting Impacts on Elements of the Historical Resource at Site 14**
- **Mitigation Measure M-CR-5b: Minimize Facilities Siting Impacts on Elements of the Historical Resource at Site 15**

This Commission recognizes that Mitigation Measures M-CR-5a and M-CR-5b are partially within the jurisdiction of the Veterans Affairs. This Commission urges the Veterans Affairs to assist in implementing these mitigation measures and finds that the Veterans Affairs can and should participate in implementing these mitigation measures.

- **Impact C-CR-1.** Construction of the proposed Project could result in a cumulatively considerable contribution to cumulative impacts on historical, archaeological, or paleontological resources, or human remains. (All Sites except Westlake Pump Station) (DEIR Section 5.5.3.5, Pages 5.5-64 to 5.5-66)

See Impacts CR-2, CR-3 and CR-4. Implementation of the listed mitigation measures would reduce the Project's contribution to cumulative impacts on paleontological resources encountered during construction to a *less-than-significant* level.

- **Mitigation Measure M-CR-2: Discovery of Archeological Resources (All Sites except Westlake Pump Station)**
- **Mitigation Measure M-CR-3: Suspend Construction Work If a Paleontological Resource Is Identified (All Sites except Westlake Pump Station and Site 9)**
- **Mitigation Measure M-CR-4: Accidental Discovery of Human Remains (All Sites except Westlake Pump Station)**

Transportation and Circulation

- **Impact TR-1.** The Project would conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system. (Sites 4, 5, 6, 7, 10, 12, 13, 14, 15, 17, 18, 19) (DEIR Section 5.6.3.4, Pages 5.6-20 to 5.6-43)

Implementation of Mitigation Measure M-TR-1 would reduce the potential traffic related impact to a *less-than-significant* level. This measure requires the SFPUC and/or its contractor to

implement a traffic control plan to reduce potential impacts on traffic flows and safety hazards during construction activities.

- **Mitigation Measure M-TR-1: Traffic Control Plan (Sites 2, 4, 5, 6, 7, 10, 12, 13, 14, 15, 17, 18, 19)**

This Commission recognizes that Mitigation Measure M-TR-1 is partially within the jurisdiction of Caltrans, SamTrans, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco. This Commission urges Caltrans, SamTrans, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco to assist in implementing this mitigation measure and finds that Caltrans, SamTrans, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco can and should participate in implementing this mitigation measure.

- **Impact TR-2.** The Project would temporarily impair emergency access to adjacent roadways and land uses during construction. (Sites 2, 5, 13) (DEIR Section 5.6.3.4, Pages 5.6-43 to 5.6-50)

Implementation of Mitigation Measure M-TR-1 would reduce the impact of blocked access to the businesses and offices to a *less-than-significant* level by requiring that access be maintained using steel trench plates, and that the contractor have ready at all times the means necessary to accommodate access by emergency vehicles to such properties, such as plating over excavations, short detours, and/or alternate routes.

- **Mitigation Measure M-TR-1: Traffic Control Plan (Sites 2, 4, 5, 6, 7, 10, 12, 13, 14, 15, 17, 18, 19)**

This Commission recognizes that Mitigation Measure M-TR-1 is partially within the jurisdiction of Caltrans, SamTrans, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco. This Commission urges Caltrans, SamTrans, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco to assist in implementing this mitigation measure and finds that Caltrans, SamTrans, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco can and should participate in implementing this mitigation measure.

- **Impact TR-3.** The Project would temporarily decrease the performance and safety of public transit, bicycle, and pedestrian facilities during construction. (Sites 12, 13, 14, 15, 19) (DEIR Section 5.6.3.4, Pages 5.6-51 to 5.6-58)

Implementation of Mitigation Measure M-TR-1 would reduce the impact on sidewalk and pedestrian access to a *less-than-significant* level by maintaining, where safe, pedestrian access and circulation and detours in areas affected by Project construction.

- **Mitigation Measure M-TR-1: Traffic Control Plan (Sites 2, 4, 5, 6, 7, 10, 12, 13, 14, 15, 17, 18, 19)**

This Commission recognizes that Mitigation Measure M-TR-1 is partially within the jurisdiction of Caltrans, SamTrans, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco. This Commission urges Caltrans, SamTrans, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco to assist in implementing this mitigation measure and finds that Caltrans, SamTrans, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco can and should participate in implementing this mitigation measure.

- **Impact C-TR-1.** Construction and operation of the proposed Project could result in a cumulatively considerable contribution to cumulative impacts related to transportation and circulation. (Sites 2, 4, 5, 6, 7, 10, 12, 13, 14, 15, 17, 18, 19) (DEIR Section 5.6.3.6, Pages 5.6-60 to 5.6-68)

See Impacts TR-2 and TR-3. In addition, implementation of Mitigation Measure M-C-TR-1 would ensure that the SFPUC and its contractor coordinate with other SFPUC construction projects in the region to avoid or minimize impacts on emergency access and on the safety of pedestrians and bicyclists during construction of the GSR Project. With implementation of these mitigation measures, the GSR Project's contribution to cumulative impacts related to impairing emergency access and hazards for alternative modes of transportation during construction would be reduced to a *less-than-significant* level.

- **Mitigation Measure M-TR-1: Traffic Control Plan (Sites 2, 4, 5, 6, 7, 10, 12, 13, 14, 15, 17, 18, 19)**
- **Mitigation Measure M-C-TR-1: Coordinate Traffic Control Plan with other SFPUC Construction Projects (Sites 2, 4, 5, 6, 7, 10, 12, 13, 14, 15, 17, 18, 19)**

This Commission recognizes that Mitigation Measure M-TR-1 is partially within the jurisdiction of Caltrans, SamTrans, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco. This Commission urges Caltrans, SamTrans, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco to assist in implementing this mitigation measure and finds that Caltrans, SamTrans, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco can and should participate in implementing this mitigation measure.

Noise and Vibration

- **Impact NO-2.** Project construction would result in excessive groundborne vibration. (Sites 3, 4, 12, 15, 18) (DEIR Section 5.7.3.4, Pages 5.7-48 to 5.7-50)

Mitigation Measure M-NO-2 requires that the construction of pipelines within 25 feet of the structures near Sites 3, 4, 12, 15, and 18 use either non-vibratory means of compaction or controlled low strength materials (CLSM) as backfill so that compaction is not necessary. Either of these pipeline construction methods would avoid significant vibration levels near the building. As a result, with implementation of Mitigation Measure M-NO-2 this groundborne vibration impact would be reduced to a *less-than-significant* level.

- **Mitigation Measure M-NO-2: Reduce Vibration Levels during Construction of Pipelines (Sites 3, 4, 12, 15, 18)**
- **Impact NO-5.** Operation of the Project would result in exposure of people to noise levels in excess of local noise standards or result in a substantial permanent increase in ambient noise levels in the Project vicinity. (Sites 1, Westlake Pump Station, 5, 7, 9, 12, 18) (DEIR Section 5.7.3.5, Pages 5.7-84 to 5.7-94)

See Impact LU-2.

- **Mitigation Measure M-NO-5: Operational Noise Control Measures (Sites 1, 5, 7, 9, 12, 18, Westlake Pump Station)**

Air Quality

- **Impact AQ-2:** Emissions generated during construction activities would violate air quality standards and would contribute substantially to an existing air quality violation. (All sites) (DEIR Section 5.8.3.4, Pages 5.8-23 to 5.8-26)

Implementation of Mitigation Measures M-AQ-2a: BAAQMD Basic Construction Measures and M-AQ-2b would reduce fugitive dust emissions and NOx emissions to a *less-than-significant* level by requiring best management practices to minimize dust emissions and by requiring the construction contractors to use newer equipment or retrofitted equipment that would reduce construction NOx emissions at the alternate sites by 20 percent if alternative sites are constructed.

- **Mitigation Measure M-AQ-2a: BAAQMD Basic Construction Measures (All Sites)**
- **Mitigation Measure M-AQ-2b: NOX Reduction during Construction of Alternate Sites**
- **Impact AQ-3.** Project construction would expose sensitive receptors to substantial pollutant concentration (Site 5) (DEIR Section 5.8.3.4, Pages 5.8-27 to 5.8-29)

Implementation of Mitigation Measure M-AQ-3 would reduce this impact to a *less-than-significant* level by reducing TAC emissions below the significance threshold.

- **Mitigation Measure M-AQ-3: Construction Health Risk Mitigation (Site 5)**
- **Impact C-AQ-1.** Construction and operation of the proposed Project could result in a cumulatively considerable contribution to cumulative impacts related to air quality. (All Sites) (DEIR Section 5.8.3.6, Pages 5.8-31 to 5.8-32)

See Impact AQ-2. Implementation of the listed mitigation measures would reduce the Project's contribution to cumulative impacts to a *less-than-significant* level.

- **Mitigation Measure M-AQ-2a: BAAQMD Basic Construction Measures (All Sites)**
- **Mitigation Measure M-AQ-2b: NOX Reduction during Construction of Alternate Sites**

Recreation

- **Impact RE-2.** The Project would deteriorate the quality of the recreational experience during construction. (Sites 1, 2, 4) (DEIR Section 5.11.3.4, Pages 5.11-17 to 5.11-24)

Implementation of Mitigation Measure M-AQ-2a would reduce this recreation impact to a *less-than-significant* level with implementation of dust control measures and equipment and vehicle best management practices.

- **Mitigation Measure M-AQ-2a: BAAQMD Basic Construction Measures (All Sites)**

Utilities and Service Systems

- **Impact UT-1:** Project construction could result in potential damage to or temporary disruption of existing utilities during construction. (All Sites) (DEIR Section 5.12.3.4, Pages 5.12-10 to 5.12-14)

Implementation of Mitigation Measures M-UT-1a, M-UT-1b, M-UT-1c, M-UT-1d, M-UT-1e, M-UT-1f, M-UT-1g, M-UT-1h, and M-UT-1i would reduce impacts related to the potential disruption and relocation of utility operations or accidental damage to existing utilities to a *less-than-significant* level by requiring that the SFPUC and/or its contractor(s) identify the potentially affected lines in advance, coordinate with utility service providers to minimize the risk of damage to existing utility lines, protect lines in place to the extent possible or temporarily reroute lines if necessary, and take special precautions when working near high-priority utility lines (e.g., gas transmission lines).

- **Mitigation Measure M-UT-1a: Confirm Utility Line Information (All Sites)**
- **Mitigation Measure M-UT-1b: Safeguard Employees from Potential Accidents Related to Underground Utilities (All Sites)**
- **Mitigation Measure M-UT-1c: Notify Local Fire Departments (All Sites)**
- **Mitigation Measure M-UT-1d: Emergency Response Plan (All Sites)**
- **Mitigation Measure M-UT-1e: Advance Notification (All Sites)**
- **Mitigation Measure M-UT-1f: Protection of Other Utilities during Construction (All Sites)**
- **Mitigation Measure M-UT-1g: Ensure Prompt Reconnection of Utilities (All Sites)**
- **Mitigation Measure M-UT-1h: Avoidance of Utilities Constructed or Modified by Other SFPUC Projects (All Sites)**
- **Mitigation Measure M-UT-1i: Coordinate Final Construction Plans with Affected Utilities (All Sites)**

- **Impact UT-4:** Project construction could result in a substantial adverse effect related to compliance with federal, State, and local statutes and regulations pertaining to solid waste. (All Sites) (DEIR Section 5.12.3.4, Pages 5.12-17 to 5.12-18)

Implementation of Mitigation Measure M-UT-4 would mitigate this impact to a *less-than-significant* level by requiring the construction contractor to prepare and implement a waste management plan.

- **Mitigation Measure M-UT-4: Waste Management Plan (All Sites)**
- **Impact C-UT-1:** Construction and operation of the proposed Project could result in a cumulatively considerable contribution to cumulative impacts related to utilities and service systems. (All Sites) (DEIR Section 5.12.3.6, Pages 5.12-20 to 5.12-24)

See Impacts UT-1 and UT-4. Implementation of the listed mitigation measures would reduce the Project's contribution to cumulative impacts on utilities and service systems to a *less-than-significant* level.

- **Mitigation Measure M-UT-1a: Confirm Utility Line Information (All Sites)**
- **Mitigation Measure M-UT-1b: Safeguard Employees from Potential Accidents Related to Underground Utilities (All Sites)**
- **Mitigation Measure M-UT-1c: Notify Local Fire Departments (All Sites)**
- **Mitigation Measure M-UT-1d: Emergency Response Plan (All Sites)**
- **Mitigation Measure M-UT-1e: Advance Notification (All Sites)**
- **Mitigation Measure M-UT-1f: Protection of Other Utilities during Construction (All Sites)**
- **Mitigation Measure M-UT-1g: Ensure Prompt Reconnection of Utilities (All Sites)**
- **Mitigation Measure M-UT-1h: Avoidance of Utilities Constructed or Modified by Other SFPUC Projects (All Sites)**
- **Mitigation Measure M-UT-1i: Coordinate Final Construction Plans with Affected Utilities (All Sites)**
- **Mitigation Measure M-UT-4: Waste Management Plan (All Sites)**

Biological Resources

- **Impact BR-1.** Project construction would adversely affect candidate, sensitive, or special-status species. (All Sites) (DEIR Section 5.14.3.4, Pages 5.14-53 to 5.14-58)

Implementation of Mitigation Measures M-BR-1a, M-BR-1b, M-BR-1c and M-BR-1d would reduce construction impacts on special-status and migratory birds, special status bat species, and monarch butterflies to a *less-than-significant* level by (1) requiring pre-construction surveys by a qualified biologist to determine whether special-status or migratory bird nests are present at or near the well facility sites and implementing related protection measures; (2) requiring pre-construction surveys and the avoidance of disturbance to roosting bats; (3) conducting surveys and installing bat exclusion devices; and (4) requiring an inspection by a qualified biologist prior to the limbing or felling of trees or the initiation of construction activities on these sites, whichever comes first; and by delaying construction at a particular site if overwintering congregations of monarch butterflies are identified on site or nearby.

- **Mitigation Measure M-BR-1a: Protection Measures during Construction for Special status Birds and Migratory Passerines and Raptors (All Sites)**
- **Mitigation Measure M-BR-1b: Protection Measures for Special-status Bats during Tree Removal or Trimming (Sites 1, 3, 4, 7, 10, 11, 12, 15, 16)**
- **Mitigation Measure M-BR-1c: Protection Measures during Structure Demolition for Special-status Bats (Site 1)**
- **Mitigation Measure M-BR-1d: Monarch Butterfly Protection Measures (Sites 1, 3, 7, 10, 12)**

This Commission recognizes that Mitigation Measure M-BR-1a is partially within the jurisdiction of the California Department of Fish and Wildlife. This Commission urges the California Department of Fish and Wildlife to assist in implementing this mitigation measure and finds that the California Department of Fish and Wildlife can and should participate in implementing this mitigation measure.

- **Impact BR-2.** Project construction could adversely affect riparian habitat or other sensitive natural communities. (Site 1) (DEIR Section 5.14.3.4, Pages 5.14-58 to 5.14-69)

Implementation of Mitigation Measure M-HY-1 and M-BR-2 would reduce the potential impacts on riparian habitat at Site 1 to *less-than-significant* levels by requiring the installation of temporary fencing to demarcate the boundary for construction activities at this site and by protecting the area from construction-related runoff and sedimentation.

- **Mitigation Measure M-HY-1: Develop and Implement a Storm Water Pollution Prevention Plan ("SWPPP") or an Erosion and Sediment Control Plan (All Sites)**
- **Mitigation Measure M-BR-2: Avoid Disturbance to Riparian Habitat (Site 1)**

This Commission recognizes that Mitigation Measure M-HY-1 is partially within the jurisdiction of SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco. This Commission urges SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco to assist in implementing this mitigation measure and finds that SWRCB, San Mateo County, the Town of

Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco can and should participate in implementing this mitigation measure.

- **Impact BR-3.** The Project would impact jurisdictional wetlands or waters of the United States. (Sites 8, 9, 11) (DEIR Section 5.14.3.4, Pages 5.14-69 to 5.14-73)

Implementation of Mitigation Measure M-HY-1 would reduce impacts to *less-than-significant* levels by protecting the area from construction related runoff and sedimentation.

- **Mitigation Measure M-HY-1: Develop and Implement a Storm Water Pollution Prevention Plan ("SWPPP") or an Erosion and Sediment Control Plan (All Sites)**

This Commission recognizes that Mitigation Measure M-HY-1 is partially within the jurisdiction of SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco. This Commission urges SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco to assist in implementing this mitigation measure and finds that SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco can and should participate in implementing this mitigation measure.

- **Impact BR-4.** Project construction would conflict with local tree preservation ordinances. (Sites 3, 4, 7, 9, 10, 11, 12, 13, 14, 15, 17, 18) (DEIR Section 5.14.3.4, Pages 5.14-73 to 5.14-79)

Implementation of Mitigation Measures M-BR-4a, M-BR-4b, and M-AE-1b would reduce to *less-than-significant* levels any impacts due to a conflict with local tree preservation ordinance by minimizing impacts on protected trees and requiring replacement trees for protected trees that are removed, in substantial accordance with local jurisdiction requirements.

- **Mitigation Measure M-BR-4a: Identify Protected Trees (Sites 3, 4, 7, 10, 11, 12, 13, 14, 15, 17)**
- **Mitigation Measure M-BR-4b: Protected Tree Replacement (Sites 4, 7, 9, 12, 15, 18)**
- **Mitigation Measure M-AE-1b: Tree Protection Measures (Sites 3, 4, 7, 10, 11, 12, 13, 14, 15, 17)**

This Commission recognizes that Mitigation Measure M-BR-4b is partially within the jurisdiction of San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno and South San Francisco. This Commission urges the San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno and South San Francisco to assist in implementing this mitigation measure and finds that the San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno and South San Francisco can and should participate in implementing this mitigation measure.

- **Impact BR-5. Project operations could adversely affect candidate, sensitive, or special-status species.** (Sites 1, 7, 12, 18, Westlake Pump Station) (DEIR Section 5.14.3.5, Pages 5.14-79 to 5.14-82)

Implementation of Mitigation Measure M-NO-5 would reduce this potential impact on sensitive biological resources to a *less-than-significant* level by requiring noise reduction measures at the site.

- **Mitigation Measure M-NO-5: Operational Noise Control Measures (Sites 1, 5, 7, 9, 12, 18, Westlake Pump Station)**
- **Impact BR-7: Operation of the Project could adversely affect sensitive habitat types associated with Lake Merced.** (All Sites) (DEIR Section 5.14.3.6, Pages 5.14-85 to 5.14-89)

Implementation of Mitigation Measures M-BR-7, M-HY-9a and M-HY-9b requires the SFPUC to implement lake level management procedures to maintain Lake Merced at water levels due to the Project. Implementation of these mitigation measures would reduce impacts on sensitive habitat at Lake Merced to a *less-than-significant* level.

- **Mitigation Measure M-HY-9a: Lake Level Monitoring and Modeling for Lake Merced**
- **Mitigation Measure M-HY-9b: Lake Level Management for Lake Merced**
- **Mitigation Measure M-BR-7: Lake Level Management for Water Level Increases for Lake Merced**

This Commission recognizes that Mitigation Measure M-BR-7 is partially within the jurisdiction of Daly City. This Commission urges Daly City to assist in implementing this mitigation measure and finds that Daly City can and should participate in implementing this mitigation measure.

- **Impact BR-8: Operation of the Project could adversely affect wetland habitats and other waters of the United States associated with Lake Merced.** (All Sites) (DEIR Section 5.14.3.6, Pages 5.14-90 to 5.14-97)

Implementation of Mitigation Measure M-HY-9a, M-HY-9b, and M-BR-8 would reduce impacts on wetland habitats and other waters of the United States associated with Lake Merced to *less-than-significant* levels by requiring corrective actions if lake levels exceed the range of lake level changes shown in Table 5.14-16 (Lake Merced Water Surface Elevation Range that Results in a Predicted No-Net-Loss of Wetlands), due to the Project (i.e., the right-hand column).

- **Mitigation Measure M-HY-9a: Lake Level Monitoring and Modeling for Lake Merced**
- **Mitigation Measure M-HY-9b: Lake Level Management for Lake Merced**
- **Mitigation Measure M-BR-8: Lake Level Management for No-Net-Loss of Wetlands for Lake Merced**

This Commission recognizes that Mitigation Measure M-BR-8 is partially within the jurisdiction of Daly City. This Commission urges Daly City to assist in implementing this mitigation

measure and finds that Daly City can and should participate in implementing this mitigation measure.

- **Impact BR-9:** Operation of the Project could adversely affect native wildlife nursery sites associated with Lake Merced. (All Sites) (DEIR Section 5.14.3.6, Pages 5.14-97 to 5.14-100)

Implementation of Mitigation Measures M-HY-9a and M-BR-7 would reduce potential impacts on native wildlife nursery sites to *less-than-significant* levels through management of water levels to avoid Project-related losses of this habitat, along with other sensitive communities.

- **Mitigation Measure M-HY-9a: Lake Level Monitoring and Modeling for Lake Merced**
- **Mitigation Measure M-BR-7: Lake Level Management for Water Level Increases for Lake Merced**

This Commission recognizes that Mitigation Measure M-BR-7 is partially within the jurisdiction of Daly City. This Commission urges Daly City to assist in implementing this mitigation measure and finds that Daly City can and should participate in implementing this mitigation measure.

- **Impact C-BR-1: Construction and operation of the proposed Project could result in significant cumulative impacts related to biological resources.** (All Sites) (DEIR Section 5.14.3.7, Pages 5.14-100 to 5.14-102)

See Impacts BR-1, BR-2, BR-3, and BR-4. Implementation of the listed mitigation measures would reduce the GSR Project's contribution to cumulative temporary impacts on biological resources to a *less-than-significant* level.

- **Mitigation Measure M-BR-1a: Protection Measures during Construction for Special status Birds and Migratory Passerines and Raptors (All Sites)**
- **Mitigation Measure M-BR-1b: Protection Measures for Special-status Bats during Tree Removal or Trimming (Sites 1, 3, 4, 7, 10, 11, 12, 15, 16)**
- **Mitigation Measure M-BR-1c: Protection Measures during Structure Demolition for Special-status Bats (Site 1)**
- **Mitigation Measure M-BR-1d: Monarch Butterfly Protection Measures (Sites 1, 3, 7, 10, 12)**
- **Mitigation Measure M-BR-2: Avoid Disturbance to Riparian Habitat (Site 1)**
- **Mitigation Measure M-BR-4a: Identify Protected Trees (Sites 3, 4, 7, 10, 11, 12, 13, 14, 15, 17)**
- **Mitigation Measure M-BR-4b: Protected Tree Replacement (Sites 4, 7, 9, 12, 15, 18)**

- **Mitigation Measure M-AE-1b: Tree Protection Measures (Sites 3, 4, 7, 10, 11, 12, 13, 14, 15, 17)**
- **Mitigation Measure M-HY-1: Develop and Implement a Storm Water Pollution Prevention Plan ("SWPPP") or an Erosion and Sediment Control Plan (All Sites)**

This Commission recognizes that Mitigation Measure M-BR-1a is partially within the jurisdiction of CDFW, Mitigation Measure M-BR-4b is partially within the jurisdiction of San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco; and Mitigation Measure M-HY-1 is partially within the jurisdiction of SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco. This Commission urges CDFW, SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco to assist in implementing these mitigation measures and finds that CDFW, SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco can and should participate in implementing these mitigation measures.

- **Impact C-BR-2:** The Project would result in cumulative construction or operational impacts related to special-status species, riparian habitat, sensitive communities, wetlands, or waters of the United States, or compliance with local policies and ordinances protecting biological resources at Lake Merced. (All Sites) (DEIR Section 5.14.3.7, Pages 5.14-103 to 5.14-106)

See Impact BR-7. Implementation of the listed mitigation measures would reduce the GSR Project's contribution to cumulative impacts on Vancouver rye grassland and fisheries and fish habitat at Lake Merced to *less-than-significant* levels.

- **Mitigation Measure M-HY-9a: Lake Level Monitoring and Modeling for Lake Merced**
- **Mitigation Measure M-HY-9b: Lake Level Management for Lake Merced**
- **Mitigation Measure M-BR-7: Lake Level Management for Water Level Increases for Lake Merced**

This Commission recognizes that Mitigation Measure M-BR-7 is partially within the jurisdiction of Daly City. This Commission urges Daly City to assist in implementing this mitigation measure and finds that Daly City can and should participate in implementing this mitigation measure.

Geology and Soils

- **Impact GE-3:** The Project would expose people or structures to substantial adverse effects related to the risk of property loss, injury, or death due to fault rupture, seismic groundshaking, or landslides. (All Sites) (DEIR Section 5.15.3.5, Pages 5.15-20 to 5.15-22)

Mitigation Measure M-GE-3 (Conduct Site-Specific Geotechnical Investigations and Implement Recommendations) would reduce the impact of seismic ground shaking, as well as settlement (see Impact GE-4), on well facilities to a *less-than-significant* level by requiring facilities to be

designed and constructed in conformance with specific recommendations contained in design-level geotechnical studies, such as site-specific seismic design parameters and lateral earth pressures, use of engineered fill, and subgrade preparations for foundations systems and floor slabs.

- **Mitigation Measure M-GE-3: Conduct Site-Specific Geotechnical Investigations and Implement Recommendations (All Sites)**
- **Impact GE-4:** The Project would be located on a geologic unit or soil that is unstable, or that would become unstable. (Sites 1, 5, 8, 12, 13, 14, 15, 16, 17, and 19) (DEIR Section 5.15.3.5, Pages 5.15-23 to 5.15-25)

Mitigation Measure M-GE-3 (Conduct Site-Specific Geotechnical Investigations and Implement Recommendations) would reduce the impact of settlement on these well facilities to a *less-than-significant* level by requiring facilities to be designed and constructed in conformance with specific recommendations contained in design-level geotechnical studies, such as over-excavation of artificial materials, re-compaction with moisture treated engineered fill, supporting structures on structurally rigid mat foundations, post-tensioning to reinforce and increase structural rigidity, and using flexible pipe connections.

- **Mitigation Measure M-GE-3: Conduct Site-Specific Geotechnical Investigations and Implement Recommendations (All Sites)**

Hydrology and Water Quality

- **Impact HY-1:** Project construction activities would degrade water quality as a result of erosion or siltation caused by earthmoving activities or by the accidental release of hazardous construction chemicals during construction. (All Sites) (DEIR Section 5.16.3.5, Pages 5.16-62 to 5.16-66)

Mitigation Measure M-HY-1 (Develop and Implement a Storm Water Pollution Prevention Plan [SWPPP] or an Erosion and Sediment Control Plan) would reduce potential water quality impacts during Project construction activities to a *less-than-significant* level by requiring measures to control erosion and sedimentation of receiving water bodies and minimize the risk of hazardous materials releases to surface water bodies. At sites where more than one acre of land would be disturbed, compliance with the requirements of the NPDES General Permit for Storm Water Discharges Associated with Construction Activity would be required.

- **Mitigation Measure M-HY-1: Develop and Implement a Storm Water Pollution Prevention Plan (“SWPPP”) or an Erosion and Sediment Control Plan (All Sites)**

This Commission recognizes that Mitigation Measure M-HY-1 is partially within the jurisdiction of SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco. This Commission urges SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco to assist in implementing this mitigation measure and finds that SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco can and should participate in implementing this mitigation measure.

- **Impact HY-2:** Discharge of groundwater could result in minor localized flooding, violate water quality standards, and/or otherwise degrade water quality. (All sites except Westlake Pump Station) (DEIR Section 5.16.3.5, Pages 5.16-66 to 5.16-69)

Mitigation Measure M-HY-2 (Management of Well Development and Pump Testing Discharges) would reduce potential water quality impacts from well development and pump testing to a *less-than-significant* level by requiring the construction contractor to prepare and implement a Project-specific discharge plan that specifies how effluent would be managed to protect water quality.

- **Mitigation Measure M-HY-2: Management of Well Development and Pump Testing Discharges (All Sites except Westlake Pump Station)**

This Commission recognizes that Mitigation Measure M-HY-2 is partially within the jurisdiction of the RWQCB. This Commission urges the RWQCB to assist in implementing this mitigation measure and finds that the RWQCB can and should participate in implementing this mitigation measure.

- **Impact HY-6:** Project operation would decrease the production rate of existing nearby irrigation wells due to localized groundwater drawdown within the Westside Groundwater Basin such that existing or planned land use(s) may not be fully supported. (All Sites) (DEIR Section 5.16.3.7, Pages 5.16-73 to 5.16-100; C&R Section 9.3.14, Pages 9.3.14-99 to 9.3.14-147)

Implementation of Mitigation Measure M-HY-6 would reduce impacts related to well interference, which may cause a decrease in production capacity at existing irrigation wells, to a *less-than-significant* level by conducting irrigation well monitoring and identifying a specific trigger level for each irrigation well at which time mitigation actions would be implemented. Mitigation Measure M-HY-6 includes having the SFPUC install a connection to the Regional Water System to allow the delivery of surface water if trigger levels are approached and well production capacity is decreased by the project operations. Mitigation Measure M-HY-6 includes actions by the SFPUC to reduce or redistribute project pumping based on identified trigger levels for each irrigation well. Mitigation Measure M-HY-6 also includes permanent mitigation actions that SFPUC would implement with the cooperation of irrigators to assure production rates are maintained at irrigation wells.

- **Mitigation Measure M-HY-6: Ensure Irrigators' Wells Are Not Prevented from Supporting Existing or Planned Land Use(s) Due to Project Operation**

This Commission recognizes that Mitigation Measure M-HY-6 is partially within the jurisdiction of San Mateo County. This Commission urges San Mateo County to assist in implementing this mitigation measure and finds that San Mateo County can and should participate in implementing this mitigation measure.

- **Impact HY-9:** Project operation could have a substantial, adverse effect on water quality that could affect the beneficial uses of Lake Merced. (All Sites) (DEIR Section 5.16.3.5, Pages 5.16-66 to 5.16-69)

Impacts related to water quality and associated beneficial uses of Lake Merced would be reduced to a *less-than-significant* level with implementation of Mitigation Measures M-HY-9a and M-HY-9b by requiring the SFPUC to implement lake level management procedures to maintain Lake Merced water levels above 0 feet City Datum. These procedures include the continuation of lake-level and groundwater monitoring; redistribution of pumping patterns or decreasing the Project pumping rate; or additions of supplemental water (either from the regional system water, treated stormwater, or recycled water), if available.

- **Mitigation Measure M-HY-9a: Lake Level Monitoring and Modeling for Lake Merced**
- **Mitigation Measure M-HY-9b: Lake Level Management for Lake Merced**
- **Impact HY-14:** Project operation may have a substantial adverse effect on groundwater depletion in the Westside Groundwater Basin over the very long term. (All Sites) (DEIR Section 5.16.3.7, Pages 5.16-142 to 5.16-146)

Mitigation Measure M-HY-14 would reduce impacts of the Project on long-term depletion of groundwater storage to less-than-significant levels by the SFPUC and the GSR Operating Committee requiring Project pumping to be restricted to extract only the volume of water in the SFPUC Storage Account, which would be adjusted to account for Basin storage losses.

- **Mitigation Measure M-HY-14: Prevent Groundwater Depletion**
- **Impact C-HY-1:** Project construction could result in a cumulatively considerable contribution to cumulative impacts on surface water hydrology and water quality. (All sites) (DEIR Section 5.16.3.8, Pages 5.16-147 to 5.16-149)

See Impacts HY-1 and HY-2. Implementation of the listed mitigation measures would reduce the Project's contribution to cumulative impacts associated with soil erosion and sedimentation and discharges of dewatering effluent to *less-than-significant* levels.

- **Mitigation Measure M-HY-1: Develop and Implement a Storm Water Pollution Prevention Plan ("SWPPP") or an Erosion and Sediment Control Plan (All Sites)**
- **Mitigation Measure M-HY-2: Management of Well Development and Pump Testing Discharges (All Sites except Westlake Pump Station)**

This Commission recognizes that Mitigation Measure M-HY-1 is partially within the jurisdiction of SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco and Mitigation Measure M-HY-2 is partially within the jurisdiction of the RWQCB. This Commission urges the SWRCB, RWQCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco to assist in implementing these mitigation measures and finds that the SWRCB, RWQCB San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco can and should participate in implementing these mitigation measures.

- **Impact C-HY-5:** Operation of the proposed Project could have a cumulatively considerable contribution to cumulative impacts on beneficial uses of surface waters. (All Sites) (DEIR Section 5.16.3.8, Pages 5.16-156 to 5.16-159)

See Impact HY-9. Implementation of the listed mitigation measures would reduce the Project's contribution to cumulative impacts associated with beneficial uses of Lake Merced to *less-than-significant* levels.

- **Mitigation Measure M-HY-9a: Lake Level Monitoring and Modeling for Lake Merced**
- **Mitigation Measure M-HY-9b: Lake Level Management for Lake Merced**
- **Impact C-HY-8:** Operation of the proposed Project would have a cumulatively considerable contribution to a cumulative impact related to groundwater depletion effect. (All Sites) (DEIR Section 5.16.3.8, Pages 5.16-161—5.16-176)

See Impact HY-14. Implementation of Mitigation Measure M-HY-14 would reduce the Project's contribution to any potential long-term cumulative depletion of groundwater storage to a *less-than-significant* level.

- **Mitigation Measure M-HY-14: Prevent Groundwater Depletion**

This Commission recognizes that Mitigation Measure M-HY-14 is partially within the jurisdiction of the cities of Daly City and San Bruno. This Commission urges the cities of Daly City and San Bruno to assist in implementing this mitigation measure and finds that the cities of Daly City and San Bruno can and should participate in implementing this mitigation measure.

Hazards and Hazardous Materials

- **Impact HZ-2:** The Project would result in a substantial adverse effect related to reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction. (All Sites) (DEIR Section 5.17.3.4, Pages 5.17-27 to 5.17-32)

The potential impact associated with release of hazardous materials during construction would be reduced to a *less-than significant* level with implementation of Mitigation Measures M-HZ-2a, M-HZ-2b, M-HZ-2c and M-HY-1 by requiring: (1) a preconstruction hazardous materials assessment within three months of construction to identify new hazardous materials sites or substantial changes in the extent of contamination at known groundwater contamination sites that could affect subsurface conditions at proposed well facility sites; (2) preparation of a site health and safety plan to protect construction worker health and safety; (3) a hazardous materials management plan to ensure that appropriate procedures are followed in the event that hazardous materials, including unanticipated hazardous materials, are encountered during project construction, and to ensure that hazardous materials are transported and disposed of in a safe and lawful manner; and (4) preparation and implementation of a storm water pollution prevention plan or an erosion and sediment control plan. See also Impact HY-1.

- **Mitigation Measure M-HZ-2a: Preconstruction Hazardous Materials Assessment (All Sites)**
- **Mitigation Measure M-HZ-2b: Health and Safety Plan (All Sites)**
- **Mitigation Measure M-HZ-2c: Hazardous Materials Management Plan (All Sites)**
- **Mitigation Measure M-HY-1: Develop and Implement a Storm Water Pollution Prevention Plan (“SWPPP”) or an Erosion and Sediment Control Plan (All Sites)**

This Commission recognizes that Mitigation Measure M-HZ-2c is partially within the jurisdiction of San Mateo County. This Commission urges San Mateo County to assist in implementing this mitigation measure and finds that San Mateo County can and should participate in implementing this mitigation measure.

- **Impact HZ-3:** The Project would result in impacts from the emission or use of hazardous materials within 0.25 mile of a school during construction. (Sites 2, 3, 4, 19 and Westlake Pump Station) (DEIR Section 5.17.3.4, Pages 5.17-33 to 5.17-36)

Implementation of Mitigation Measures M-HY-1 and M-HZ-2c would reduce impacts on Ben Franklin Intermediate School, Garden Village Elementary School, and R.W. Drake Preschool, due to emission or use of hazardous materials during construction, to a *less-than-significant* level by requiring measures for controlling non-stormwater (i.e., equipment maintenance and servicing requirements and equipment fueling requirements), waste, and potential hazardous materials pollution, which would also reduce the potential for the accidental release of hazardous construction chemicals, and by requiring the contractor to prepare a Hazards Materials Management Plan to ensure proper handling of all hazardous substances that are used during construction.

- **Mitigation Measure M-HY-1: Develop and Implement a Storm Water Pollution Prevention Plan [SWPPP] or an Erosion and Sediment Control Plan (All Sites)**
- **Mitigation Measure M-HZ-2c: Hazardous Materials Management Plan (All Sites)**

This Commission recognizes that Mitigation Measure M-HY-1 is partially within the jurisdiction of SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco. This Commission urges SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco to assist in implementing this mitigation measure and finds that SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco can and should participate in implementing this mitigation measure.

- **Impact C-HZ-1:** Construction and operation of the proposed Project could result in a cumulatively considerable contribution to cumulative impacts related to hazards and hazardous materials. (All Sites) (DEIR Section 5.17.3.6, Pages 5.17-40 to 5.17-45)

See Impact HZ-2. Implementation of the GSR Project's contribution to cumulative impacts related to release of hazardous chemicals during construction would be reduced to a *less-than-significant* level with implementation of the listed mitigation measures.

- **Mitigation Measure M-HZ-2a: Preconstruction Hazardous Materials Assessment (All Sites)**
- **Mitigation Measure M-HZ-2b: Health and Safety Plan (All Sites)**
- **Mitigation Measure M-HZ-2c: Hazardous Materials Management Plan (All Sites)**
- **Mitigation Measure M-HY-1: Develop and Implement a Storm Water Pollution Prevention Plan ("SWPPP") or an Erosion and Sediment Control Plan (All Sites)**

This Commission recognizes that Mitigation Measure M-HZ-2c is partially within the jurisdiction of San Mateo County. This Commission urges San Mateo County to assist in implementing this mitigation measure and finds that San Mateo County can and should participate in implementing this mitigation measure.

B. Impacts of Mitigation

The Final EIR identified potentially significant secondary impacts that could result from construction activities associated with implementation of certain mitigation actions identified in Mitigation Measure M-HY-6. The Final EIR determined that mitigation measures identified to mitigate construction-related impacts of the Project would also mitigate construction-related impacts associated with implementation of these mitigation actions. In making these findings and adopting **Exhibit 1**, the **MMRP**, the Commission finds that application of Project mitigation measures to the secondary impacts of implementing mitigation actions under Mitigation Measure M-HY-6 will reduce the impacts listed in this Section III to *less-than-significant* levels. **Exhibit 1**, the **MMRP**, includes **Table MMRP-2**, Mitigation Measures Applicable to Implementation of M-HY-6 Mitigation Actions. **Table MMRP-2** to the **MMRP** identifies which Project mitigation measures would apply to reduce the secondary impacts associated with construction activities undertaken to implement any of the identified mitigation actions in Mitigation Measure M-HY-6. This information is also summarized below and discussed in the DEIR Section 5.16, Pages 5.16-162 to 5.16-174 and in the C&R Section 9.5, Pages 9.5-63 to 9.5-72.

Land Uses

- Impacts to recreational land uses at golf courses and visual quality or scenic views in golf courses or cemeteries. (**Mitigation Action #3: Replace Irrigation Water Source.**)
 - **Mitigation Measure M-AE-1a: Site Maintenance**
 - **Mitigation Measure M-NO-1: Noise Control Plan**
 - **Mitigation Measure M-AQ-2a: BAAQMD Basic Construction Measures**

- **Mitigation Measure M-TR-1: Traffic Control Plan**

This Commission recognizes that Mitigation Measure M-TR-1 is partially within the jurisdiction of Caltrans, SamTrans, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco. This Commission urges Caltrans, SamTrans, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco to assist in implementing this mitigation measure and finds that Caltrans, SamTrans, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco can and should participate in implementing this mitigation measure.

Aesthetics

- Impacts due to view of construction equipment, vehicles and activities. (**Mitigation Action #3: Replace Irrigation Water Source; Mitigation Action #6: Lower Pump in Irrigation Well; Mitigation Action #7: Lower And Change Pump in Irrigation Well; Mitigation Action #8: Add Storage Capacity for Irrigation Supply Mitigation Action #9: Replace Irrigation Well.**)
 - **Mitigation Measure M-AE-1a: Site Maintenance**

Cultural and Paleontological Resources

- Impacts due to constructing close to an historic resource. (**Mitigation Action #3: Replace Irrigation Water Source; Mitigation Action #8: Add Storage Capacity for Irrigation Supply; Mitigation Action #9: Replace Irrigation Well.**)
 - **Mitigation Measure M-AE-3a: Implement Landscape Screening**
- Impacts from disturbance of archeological or paleontological resources. (**Mitigation Action #3: Replace Irrigation Water Source; Mitigation Action #8: Add Storage Capacity for Irrigation Supply; Mitigation Action #9: Replace Irrigation Well.**)
 - **Mitigation Measure M-CR-2: Discovery of Archaeological Resources**
 - **Mitigation Measure M-CR-3: Suspend Construction Work if a Paleontological Resource is Identified**
 - **Mitigation Measure M-CR-4: Accidental Discovery of Human Remains**

Transportation and Circulation

- Temporary impacts to local roadway circulation. (**Mitigation Action #3: Replace Irrigation Water Source; Mitigation Action #6: Lower Pump in Irrigation Well; Mitigation Action #7: Lower And Change Pump in Irrigation Well; Mitigation Action #8: Add Storage Capacity for Irrigation Supply; Mitigation Action #9: Replace Irrigation Well.**)
 - **Mitigation Measure M-TR-1: Traffic Control Plan**

This Commission recognizes that Mitigation Measure M-TR-1 is partially within the jurisdiction of Caltrans, SamTrans, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco. This Commission urges Caltrans, SamTrans, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco to assist in implementing this mitigation measure and finds that Caltrans, SamTrans, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco can and should participate in implementing this mitigation measure.

Noise and Vibration

- Impacts from construction noise exceeding local noise standards or increasing ambient noise levels. (**Mitigation Action #3: Replace Irrigation Water Source (LSM); Mitigation Action #8: Add Storage Capacity for Irrigation Supply (LSM); Mitigation Action #9: Replace Irrigation Well (SUM, See Section IV, B.)**)
 - **Mitigation Measure M-NO-1: Noise Control Plan**

Air Quality

- Impacts during construction from fugitive dust or emissions of other criteria air pollutants. (**Mitigation Action #3: Replace Irrigation Water Source; Mitigation Action #8: Add Storage Capacity for Irrigation Supply; Mitigation Action #9: Replace Irrigation Well.**)
 - **Mitigation Measure M-AQ-2a: BAAQMD Basic Construction Measures**

Utilities and Service Systems

- Impact from generation of solid waste. (**Mitigation Action #3: Replace Irrigation Water Source; Mitigation Action #8: Add Storage Capacity for Irrigation Supply; Mitigation Action #9: Replace Irrigation Well.**)
 - **Mitigation Measure M-UT-4: Waste Management Plan**
- Impacts from potential disruption and relocation of utilities or accidental damage to existing utilities. (**Mitigation Action #3: Replace Irrigation Water Source; Mitigation Action #8: Add Storage Capacity for Irrigation Supply; Mitigation Action #9: Replace Irrigation Well.**)
 - **Mitigation Measure M-UT-1a: Confirm Utility Line Information**
 - **Mitigation Measure M-UT-1b: Safeguard Employees from Potential Accidents Related to Underground Utilities**
 - **Mitigation Measure M-UT-1c: Notify Local Fire Departments**
 - **Mitigation Measure M-UT-1d: Emergency Response Plan**

- **Mitigation Measure M-UT-1e: Advance Notification**
- **Mitigation Measure M-UT-1f: Protection of Other Utilities during Construction**
- **Mitigation Measure M-UT-1g: Ensure Prompt Reconnection of Utilities**
- **Mitigation Measure M-UT-1h: Avoidance of Utilities Constructed or Modified by Other SFPUC Projects**
- **Mitigation Measure M-UT-1i: Coordinate Final Construction Plans with Affected Utilities**

Biological Resources

- Impacts from tree removals or disturbance of sensitive habitats. (**Mitigation Action #3: Replace Irrigation Water Source; Mitigation Action #8: Add Storage Capacity for Irrigation Supply; Mitigation Action #9: Replace Irrigation Well.**)
- **Mitigation Measure M-BR-1a: Protection Measures during Construction for Special status Birds and Migratory Passerines and Raptors**
- **Mitigation Measure M-BR-1b: Protection Measures for Special-status Bats during Tree Removal or Trimming**
- **Mitigation Measure M-BR-1c: Protection Measures during Structure Demolition for Special-status Bats**
- **Mitigation Measure M-HY-1: Develop and Implement a Storm Water Pollution Prevention Plan (“SWPPP”) or an Erosion and Sediment Control Plan**
- **Mitigation Measure M-BR-4a: Identify Protected Trees**
- **Mitigation Measure M-BR-4b: Protected Tree Replacement**

This Commission recognizes that Mitigation Measure M-BR-1a is partially within the jurisdiction of CDFW, Mitigation Measure M-BR-4b is partially within the jurisdiction of San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco; and Mitigation Measure M-HY-1 is partially within the jurisdiction of SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco. This Commission urges CDFW, SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco to assist in implementing these mitigation measures and finds that CDFW, SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco can and should participate in implementing these mitigation measures.

Geology and Soils

- Impacts from placement of pipelines or storage tank on or in unstable soil. (**Mitigation Action #3: Replace Irrigation Water Source; Mitigation Action #7: Lower And Change Pump in Irrigation Well.**)
 - **Mitigation Measure M-GE-3: Conduct Site-Specific Geotechnical Investigations and Implement Recommendations**

Hydrology and Water Quality

- Impacts to water quality from erosion and sedimentation caused by vegetation removal. (**Mitigation Action #3: Replace Irrigation Water Source; Mitigation Action #8: Add Storage Capacity for Irrigation Supply; Mitigation Action #9: Replace Irrigation Well.**)
 - **Mitigation Measure M-HY-1: Develop and Implement a Storm Water Pollution Prevention Plan (“SWPPP”) or an Erosion and Sediment Control Plan**

This Commission recognizes that Mitigation Measure M-HY-1 is partially within the jurisdiction of SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco. This Commission urges SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco to assist in implementing this mitigation measure and finds that SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco can and should participate in implementing this mitigation measure.

Hazards and Hazardous Materials

- Impacts from accidental release of hazardous materials, including near a school. (**Mitigation Action #3: Replace Irrigation Water Source; Mitigation Action #6: Lower Pump in Irrigation Well; Mitigation Action #7: Lower And Change Pump in Irrigation Well; Mitigation Action #8: Add Storage Capacity for Irrigation Supply; Mitigation Action #9: Replace Irrigation Well.**)
 - **Mitigation Measure M-HY-1: Develop and Implement a Storm Water Pollution Prevention Plan (“SWPPP”) or an Erosion and Sediment Control Plan**

This Commission recognizes that Mitigation Measure M-HY-1 is partially within the jurisdiction of SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco. This Commission urges SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco to assist in implementing this mitigation measure and finds that SWRCB, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco can and should participate in implementing this mitigation measure.

- Impacts from siting pipelines, storage tanks or replacement wells near a hazardous materials site. (**Mitigation Action #3: Replace Irrigation Water Source; Mitigation Action #8: Add Storage Capacity for Irrigation Supply; Mitigation Action #9: Replace Irrigation Well.**)
 - **Mitigation Measure M-HZ-2a: Preconstruction Hazardous Materials Assessment**

- **Mitigation Measure M-HZ-2b: Health and Safety Plan**
- **Mitigation Measure M-HZ-2c: Hazardous Materials Management Plan**

This Commission recognizes that Mitigation Measure M-HZ-2c is partially within the jurisdiction of San Mateo County. This Commission urges San Mateo County to assist in implementing this mitigation measure and finds that San Mateo County can and should participate in implementing this mitigation measure.

IV. Significant Impacts That Cannot Be Avoided or Reduced to a Less-Than-Significant Level

Based on substantial evidence in the whole record of these proceedings, the Commission finds that, where feasible, changes or alterations have been required or incorporated into the GSR Project to reduce the significant environmental impacts as identified in the Final EIR for the Project. The Commission finds that the mitigation measures in the Final EIR and described below are appropriate, and that changes have been required in, or incorporated into, the GSR Project that, to use the language of Public Resources Code section 21002 and CEQA Guidelines section 15091, may substantially lessen, but do not avoid (i.e., reduce to less than significant levels), the potentially significant environmental effect associated with implementation of the Project, as described in the GSR Final EIR Chapter 5. The Commission adopts all of the mitigation measures proposed in the GSR Final EIR that are relevant to the Project and set forth in the MMRP, attached hereto as **Exhibit 1**.

The Commission further finds, however, for the GSR Project impacts listed below, that no mitigation is currently available to render the effects less than significant. The effects, therefore, remain significant and unavoidable. Based on the analysis contained within the Final EIR, other considerations in the record, and the standards of significant, the Commission finds that because some aspects of the GSR Project would cause potentially significant impacts for which feasible mitigation measures are not available to reduce the impact to a less-than-significant level, the impacts are ***significant and unavoidable***.

The Commission further finds that the GSR Project is a component of the WSIP and, therefore, will contribute to the significant and unavoidable growth-inducing impact caused by the WSIP water supply decision as analyzed in the WSIP PEIR, Chapter 7, which is incorporated by reference in the GSR Project Final EIR in Chapter 6. For the WSIP growth-inducing impact listed below, the effect remains ***significant and unavoidable***.

The Commission determines that the following significant impacts on the environment, as reflected in the GSR Final EIR, are unavoidable, but under Public Resources Code Section 21081(a) (3) and (b), and CEQA Guidelines Sections 15091(a) (3), 15092(b) (2) (B), and 15093, the Commission determines that the impacts are acceptable due to the overriding considerations described in Section VI below. These findings are supported by substantial evidence in the record of this proceeding.

A. GSR Project Impacts

The project-specific impacts associated with GSR Project construction are determined to be significant and unavoidable at one or more sites where GSR Project facilities will be constructed despite the SFPUC's adoption of all feasible mitigation measures. No significant and unavoidable impacts will result from the GSR Project operations.

For each impact identified below, the impact statement for each impact identifies the sites where the impact will be less than significant with the implementation of the listed mitigation measures (denominated as "LSM") and the sites where the impact will be significant and unavoidable despite the implementation of listed mitigation measures (denominated as "SUM"). If a site is not listed in the impact statement it either will have no impact or a less than significant impact for that particular identified impact. The titles of the mitigation measures listed after each impact statement follow the approach used in the Final EIR and indicate all sites where the mitigation measures will be implemented as a result of any GSR Project impact and not just the sites that will cause the particular listed impact discussed immediately above.

Land Use

- **Impact LU-1:** Project construction would have a substantial impact on the existing character of the vicinity and could substantially disrupt or displace existing land uses or land use activities. (DEIR pages 5.2-20 to 5.2-35.)(LSM Sites 5 [Consolidated Treatment], 7, 10, 11, 13, 15, and 17; SUM Sites 1, 3, 4, 5 [On-site Treatment], 9, 12, 14, 16, 18 and 19.)

Project construction would have a significant but mitigable impact on land uses at Sites 5 [Consolidated Treatment], 7, 10, 11, 13, 15, and 17 through the implementation of the Mitigation Measures M-LU-1, M-TR-1, M-NO-1, M-NO-3, M-AQ-2a, and M-AQ-3, which would provide for (1) cemetery visitor access and access to businesses and bus stops through a transportation control plan; (2) construction noise controls that limit noise levels to specified amounts at specified hours and locations; and (3) controls on construction-related air pollutants.

Nighttime noise from well drilling at Sites 1, 3, 4, 12, 16, and 19, which must proceed continuously for a seven day period, will have a *significant and unavoidable* impact on nearby residential uses despite implementation of mitigation measures. The land use impact at Site 5 will be *significant and unavoidable* even with the implementation of mitigation measures to control construction noise due to the proximity of residential users to this site and daytime construction over 14 months. The land use impact at Sites 9, 14, and 18 will be *significant and unavoidable* even with the implementation of mitigation measures to control construction noise due to the proximity of residential users to these sites, daytime construction over 16 months, and night time construction associated with well installation over a seven day period.

- **Mitigation Measure M-LU-1: Maintain Internal Cemetery Access (Site 7 [Consolidated Treatment at Site 6] and Site 14).**
- **Mitigation Measure M-TR-1: Traffic Control Plan (Sites 2, 4, 5, 6, 7, 10, 12, 13, 14, 15, 17 [Alternate], 18 [Alternate] and 19 [Alternate]).**
- **Mitigation Measure M-NO-1: Noise Control Plan (Sites 1, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 [Alternate], 18 [Alternate], and 19 [Alternate]).**

- **Mitigation Measure M-NO-3: Expanded Noise Control Plan (Sites 1, 3, 4, 5, 9, 10, 11, 12, 13, 14, 15, 16, 17 [Alternate], 18 [Alternate], and 19 [Alternate]).**
- **Mitigation Measure M-AQ-2a: BAAQMD Basic Construction Measures (All Sites).**
- **Mitigation Measure M-AQ-3: Construction Health Risk Mitigation (Site 5 On-site Treatment).**

This Commission recognizes that Mitigation Measure M-TR-1 is partially within the jurisdiction of Caltrans, SamTrans, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco. This Commission urges Caltrans, SamTrans, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco to assist in implementing this mitigation measure and finds that Caltrans, SamTrans, San Mateo County, the Town of Colma, and the cities of Daly City, Millbrae, San Bruno, and South San Francisco can and should participate in implementing this mitigation measure.

- **Impact C-LU-1:** Construction and operation of the proposed Project could result in a cumulatively considerable contribution to cumulative impacts related to land use. (DEIR pages 5.2-39 to 5.2-40; 5.7-98 to 5.7-99.) (LSM Site 15; SUM Sites 9, 12, and 19.)

Impacts from the GSR project would make a considerable contribution to cumulative project construction impacts due to construction noise at Sites 9, 12, 15, and 19, which could alter the character or disrupt or displace land uses at these sites. Noise mitigation measures M-NO-1, M-NO-3, and M-NO-5 would reduce these impacts to less-than-significant level at Site 15, but due to nighttime construction, land use disruption at Sites 9, 12, and 19 would remain *significant and unavoidable*.

- **Mitigation Measure M-NO-1: Noise Control Plan (Sites 1, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 [Alternate], 18 [Alternate], and 19 [Alternate]).**
- **Mitigation Measure M-NO-3: Expanded Noise Control Plan (Sites 1, 3, 4, 5, 9, 10, 11, 12, 13, 14, 15, 16, 17 [Alternate], 18 [Alternate], and 19 [Alternate]).**
- **Mitigation Measure M-NO-5: Operational Noise Control Measures (Sites 1, 5 [On-site Treatment], 9, 18 [Alternate] and Westlake Pump Station.**

Aesthetics

- **Impact AE-1:** Project construction would result in a significant and unavoidable impact on the visual character of the area surrounding Site 7, related to the removal of trees. (DEIR Section 5.3.3.4, Pages 5.3-56 to 5.3-76.) (LSM Sites 4, 12, 13, 14, 15, and 18; SUM Site 7.)

Project construction would have a significant but mitigable visual impact through the implementation of Mitigation Measures M-AE-1a, M-AE-1b, M-AE-1c, M-AE-1d, M-AE-1e, and M-CR-1a, which would keep construction materials out of view, keep construction sites clean, and require protection and replacement of trees at Sites 4, 12, 13, 14, 15, and 18. Visual impacts at Site 7 would remain significant and unavoidable because site construction requires the

removal of 41 eucalyptus trees in the SFPUC right-of-way that are part of a tree mass identified in the Town of Colma's General Plan. The SFPUC's Integrated Vegetation Management Policy prohibits eucalyptus trees in the right-of-way, thereby precluding the replanting of eucalyptus trees at the same location. Even with the implementation of the listed mitigation measures, the project would permanently change the visual quality of Site 7, resulting in a *significant and unavoidable* impact at this location.

- **Mitigation Measure M-AE-1a: Site Maintenance (Sites 4, 7, 12, 13, 14, 15, and 18 [Alternative])**
- **Mitigation Measure M-AE-1b: Tree Protection Measures (Sites 3, 4, 7, 10, 11, 12, 13, 14, 15, and 17 [Alternative])**
- **Mitigation Measures M-AE-1c: Develop and Implement a Tree Replanting Plan (Site 12)**
- **Mitigation Measure M-AE-1d: Construction Area Screening (Site 15)**
- **Mitigation Measure M-AE-1e: Tree Removal and Replacement (Site 7)**
- **Mitigation Measure M-CR-1a: Minimize Construction-related Impacts on Elements of the Historical Resource at Site 14**

This Commission recognizes that Mitigation Measure M-AE-1e is partially within the jurisdiction of the Town of Colma and Mitigation Measure M-CR-1a is partially within the jurisdiction of Veterans Affairs. This Commission urges the Town of Colma and the Veterans Affairs to assist in implementing these mitigation measures and finds that the Town of Colma and the Veterans Affairs can and should participate in implementing these mitigation measures.

Noise

- **Impact NO-1:** Project construction would result in noise levels in excess of local standards. (DEIR pages 5.7-39 to 5.7-48.)(LSM Sites 3, 8, 10, 11, 13, 14, and 17; SUM Sites 1, 4, 9, 12, 16, 18, and 19.)

Project construction would conflict with daytime noise standards or night time noise restrictions or both in the San Mateo County, the Town of Colma; and the cities of Daly City; Millbrae, San Bruno and South San Francisco. Mitigation Measure M-NO-1 would reduce these impacts at Sites 3, 8, 10, 11, 13, 14, and 17 to a less-than-significant level. But, even with mitigation, construction associated with well drilling and pump testing would exceed local nighttime noise limits or restrictions at Sites 1, 4, 9, 12, 16, 18, and 19. This impact would remain *significant and unavoidable* at these sites.

- **Mitigation Measure M-NO-1: Noise Control Plan (Sites 1, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 [Alternate], 18 [Alternate], and 19 [Alternate]).**

- **Impact NO-3:** Project construction would result in a substantial temporary increase in ambient noise levels. (DEIR pages 5.7-50 to 5.7-81.) (LSM Sites 5 [Consolidated Treatment], 10, 11, 13, 15, and 17; SUM Sites 1, 3, 4, 5 [On-site Treatment], 9, 12, 14, 16, 18 and 19.)

Project construction would result in a temporary increase in ambient noise levels that would exceed speech and sleep interference thresholds at nearby buildings. Mitigation Measures M-NO-1 and M-NO-3 would reduce these impacts to a less-than-significant level at Sites 5 [Consolidated Treatment], 10, 11, 13, 15, and 17. But, the daytime speech threshold or nighttime sleep interference threshold would be exceeded, even with the implementation of mitigation measures, at Sites 1, 3, 4, 5 [On-site Treatment], 9, 12, 14, 16, 18, and 19. This impact would remain *significant and unavoidable* at these sites.

- **Mitigation Measure M-NO-1: Noise Control Plan (Sites 1, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 [Alternate], 18 [Alternate], and 19 [Alternate]).**
- **Mitigation Measure M-NO-3: Expanded Noise Control Plan (Sites 1, 3, 4, 5, 9, 10, 11, 12, 13, 14, 15, 16, 17 [Alternate], 18 [Alternate], and 19 [Alternate]).**
- **Impact C-NO-1:** Construction and operation of the proposed Project could result in a cumulatively considerable contribution to cumulative impacts related to noise. (DEIR pages 5.7-95 to 5.7-99.) (LSM Sites 1, 5 [On-site Treatment], 7 [On-site Treatment], 8, 9, 11, 15, 17, 18, and Westlake Pump Station; SUM Sites 12 and 19.)

Operation of the project could make a considerable contribution to cumulative impacts in excess of established standards and to ambient noise levels at Sites 1, 5 [On-site Treatment], 7 [On-site Treatment], 9, 12, 18 and the Westlake Pump Station but mitigation measures would reduce the Project's contribution to a less than significant level.

Construction of the Project could make a considerable contribution to cumulative noise levels in excess of established noise standard in the Town of Colma at Sites 8 and 17 and in South San Francisco at Site 11 but the listed mitigation measures would reduce the Project's contribution to a less-than-significant level.

The project could make a considerable contribution to increases in cumulative ambient noise levels at Sites 8, 15, and 17 but the listed mitigation measures would reduce the Project contribution to a less-than-significant level. However, at Sites 12 and 19, even with the implementation of mitigation measures, the Project would have a cumulative considerable contribution to increased ambient noise levels that would affect a church and preschool noise levels during the daytime and the Project impact would remain *significant and unavoidable* at Sites 12 and 19.

- **Mitigation Measure M-NO-1: Noise Control Plan (Sites 1, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 [Alternate], 18 [Alternate], and 19 [Alternate]).**
- **Mitigation Measure M-NO-3: Expanded Noise Control Plan (Sites 1, 3, 4, 5, 9, 10, 11, 12, 13, 14, 15, 16, 17 [Alternate], 18 [Alternate], and 19 [Alternate]).**

- **Mitigation Measure M-NO-5: Operational Noise Control Measures (Sites 1, 5 [On-site Treatment], 9, 18 [Alternate] and Westlake Pump Station)**

B. Impacts of GSR Mitigation Measures

The Final EIR identified potentially significant secondary impacts that could result from construction activities associated with implementation of certain mitigation actions identified in Mitigation Measure M-HY-6. The Final EIR determined that mitigation measures identified to mitigate construction-related impacts of the Project would also mitigate construction-related impacts associated with implementation of these mitigation actions, as explained in Section III, with the exception of one impact related to construction noise, which is explained in this Section IV. In making these findings and adopting **Exhibit 1**, the **MMRP**, the Commission finds that application of Project mitigation to the secondary impact related to noise discussed below associated with mitigation actions under Mitigation Measure M-HY-6 will reduce but that this noise impact will remain *significant and unavoidable*. **Exhibit 1**, the **MMRP**, includes a **Table MMRP-2**, Mitigation Measures Applicable to Implementation of M-HY-6 Mitigation Actions. **Table MMRP-2** to the **MMRP** identifies which Project mitigation measures would apply to reduce the secondary impacts associated with construction activities undertaken to implement any of the identified mitigation actions in Mitigation Measure M-HY-6. This information is also summarized in Section III and below and discussed in the DEIR Section 5.16, Page 5.16-168 and in the C&R Section 9.5, Pages 9.5-63 to 9.5-72.

Noise and Vibration

- Impacts from construction noise associated with well drilling in proximity to sensitive noise receptors. (**Mitigation Action #3: Replace Irrigation Water Source (LSM); Mitigation Action #8: Add Storage Capacity for Irrigation Supply (LSM); Mitigation Action #9: Replace Irrigation Well (SUM).**)
- **Mitigation Measure M-NO-2: Reduce Vibration Levels during Construction of Pipelines**

C. WSIP Water Supply Impacts

The WSIP PEIR and the SFPUC's Resolution No. 08-0200 related to the WSIP water supply decision identified three significant and unavoidable impacts of the WSIP: **Impact 5.4.1-2- Stream Flow: Effects on flow along Alameda Creek below the Alameda Creek Division Dam; Impact 5.5.5-1-Fisheries: Effects on fishery resources in Crystal Springs reservoir (Upper and Lower); and Impact 7-1-Indirect growth inducing impacts in the SFPUC service area.** Mitigation measures proposed in the PEIR were adopted by the SFPUC for these impacts; however, the mitigation measures could not reduce all the impacts to a less than significant level, and these impacts were determined to be significant and unavoidable. The SFPUC adopted the mitigation measures proposed in the PEIR to reduce these impacts when it approved the WSIP in its Resolution No. 08-0200. The SFPUC also adopted a Mitigation Monitoring and Reporting Program as part of that approval. The findings regarding the three impacts and mitigation measures for these impacts set forth in Resolution No. 08-0200 are incorporated into these findings by this reference, as though fully set forth in these CEQA Findings.

Subsequent to the certification of the PEIR, the Planning Department has conducted more detailed, site-specific review of two of the significant and unavoidable water supply impacts identified in the PEIR, Impact 5.4.1-2 and Impact 5.5.5-1, as explained in the GSR Project EIR at Section 6.3.2 (Draft EIR, page 6-10). The Planning Department updated analyses based on more project-specific information has determined that these two impacts will not be significant and unavoidable. These CEQA Findings summarize these updated impact analyses as well as the PEIR analysis of Impact 7.1.

- **PEIR Impact 5.4.1-2-Stream Flow: Effects on flow along Alameda Creek below the Alameda Creek Division Dam**

The project level analysis in the Calaveras Dam Replacement project Final EIR modifies the PEIR determination regarding PEIR Impact 5.4.1-2 and concludes that the impact related to stream flow along Alameda Creek between the diversion dam and the confluence with Calaveras Creek) will be less than significant based on more detailed, site-specific modeling and data. Project-level conclusions supersede any contrary impact conclusions in the PEIR. The SFPUC adopted CEQA Findings with respect to the approval of the Calaveras Dam Improvement project in Resolution No. 11-0015. The CEQA Findings in Resolution No. 11-0015 related to the impacts on fishery resources due to inundation effects are incorporated into these findings by this reference, as though fully set forth in these CEQA Findings.

- **PEIR Impact 5.5.5.-1-Fisheries: Effects on fishery resources in Crystal Springs reservoir (Upper and Lower)**

The project-level fisheries analysis in the Lower Crystal Springs Dam Improvement project Final EIR modifies the PEIR impact determination regarding PEIR Impact 5.5.5-1 based on more detailed site-specific data and analysis and determined that impacts on fishery resources due to inundation effects would be less than significant. Project-level conclusions supersede any contrary impact conclusions in the PEIR. The SFPUC adopted CEQA Findings with respect to the approval of the Lower Crystal Springs Dam Improvement project in Resolution No. 10-0175. The CEQA Findings in Resolution No. 10-0175 related to the impacts on fishery resources due to inundation effects are incorporated into these findings by this reference, as though fully set forth in these CEQA Findings.

- **PEIR Impact 7-1-Indirect growth inducing impacts in the SFPUC service area**

The remaining significant and unavoidable water supply impact listed in Resolution No. 08-0200 is related to **WSIP Water Supply and System Operation Impact 7-1 Growth**: The WSIP would result in potentially significant and unavoidable indirect growth-inducement impacts in the SFPUC service area.

By providing water to support planned growth in the SFPUC service area, the WSIP will result in significant and unavoidable growth inducement effects that are primarily related to secondary effects such as air quality, traffic congestion and water quality. (PEIR Chapter 7). The WSIP identifies mitigation measures adopted by jurisdictions that have prepared general plans and related land use plans and major projects in the SFPUC service area to reduce the identified impacts of planned growth. A summary of projects reviewed under CEQA and mitigation measures identified are included in Appendix E, Section E.6 of the PEIR.

Despite the adoption of mitigation measures, some of the identified impacts of planned growth cannot be reduced to a less-than-significant levels, and the WSIP, which has a longer planning horizon and somewhat different growth projections than some general plans, would also be expected to result in impacts not addressed by adopted mitigation measures as summarized in the PEIR Chapter 7. Jurisdictions have adopted overriding consideration in approving plans that support growth for which mitigation measures have not been identified and the SFPUC adopted overriding considerations in approving the WSIP through Resolution No. 08-0200. Thus, some of the growth that the WSIP would support would result in secondary impacts that would remain *significant and unavoidable*.

V. Evaluation of Project Alternatives

This section describes the Project as well as alternatives and the reasons for approving the Project and for rejecting the alternatives. CEQA mandates that an EIR evaluate a reasonable range of alternatives to the project or the project location that generally reduce or avoid potentially significant impacts of the project. CEQA requires that every EIR also evaluate a “No Project” alternative. Alternatives provide a basis of comparison to the Project in terms of their significant impacts and their ability to meet project objectives. This comparative analysis is used to consider reasonable, potentially feasible options for minimizing environmental consequences of the Project.

A. Reasons for Approval of the Project

The overall goals of the WSIP for the regional water system are to:

- Maintain high-quality water and a gravity-driven system.
- Reduce vulnerability to earthquakes – deliver basic service to the three regions in the service area within 24 hours and restore facilities to meet average-day demand within 30 days after a major earthquake.
- Increase delivery reliability – allow planned maintenance shutdown without customer service interruption and minimize risk of service interruption from unplanned outages.
- Meet customer water supply needs through 2018 – meet average annual water purchase requests during nondrought years and meet dry-year delivery needs while limiting rationing to a maximum 20 percent systemwide; diversify water supply options during nondrought and drought years and improve use of new water resources, including the use of groundwater, recycled water, conservation and transfers.
- Enhance sustainability.
- Achieve a cost-effective, fully operational system.

The Project would help meet WSIP goals by providing additional dry-year supply and providing additional pumping capacity in the South Westside Groundwater Basin in an emergency. Specific objectives of the GSR Project are:

- Conjunctively manage the South Westside Groundwater Basin through the coordinated use of SFPUC surface water and groundwater pumped by the Partner Agencies.
- Provide supplemental SFPUC surface water to the Partner Agencies in normal and wet years, with a corresponding reduction of groundwater pumping by these agencies, which then allows for in-lieu recharge of the South Westside Groundwater Basin.
- Increase the dry-year and emergency pumping capacity of the South Westside Groundwater Basin by an average annual 7.2 mgd.
- Provide a new dry-year groundwater supply for the SFPUC's customers and increase water supply reliability during the 8.5-year design drought cycle.

B. Alternatives Rejected and Reasons for Rejection

The Commission rejects the alternatives set forth in the Final EIR and listed below because the Commission finds that there is substantial evidence, including evidence of economic, legal, social, technological, and other considerations described in this section in addition to those described in Section VI below under CEQA Guidelines 15091(a)(3), that make such Alternatives infeasible. In making these infeasibility determinations, the Commission is aware that CEQA defines "feasibility" to mean "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, legal, and technological factors." The Commission is also aware that under CEQA case law the concept of "feasibility" encompasses (i) the question of whether a particular alternative promotes the underlying goals and objectives of a project, and (ii) the question of whether an alternative is "desirable" from a policy standpoint to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, legal, and technological factors.

Alternative 1: No Project

Under the No Project Alternative, the GSR Project would not be constructed or operated. The SFPUC would not conjunctively manage the South Westside Groundwater Basin with the Partner Agencies and the basin would continue to be operated as it is now. The 16 groundwater wells and associated well facilities (pump stations and treatment facilities) would not be constructed or operated, the Westlake Pump Station would not be upgraded, and a new dry-year water supply would not be developed. The six test wells installed at Site 2 (Park Plaza Meter), Site 5 (Right-of-way at Serra Bowl), Site 6 (Right-of-way at Colma BART), Site 8 (Right-of-way at Serramonte Boulevard), Site 10 (Right-of-way at Hickey Boulevard) and Site 13 (South San Francisco Linear Park) would be abandoned in accordance with regulatory standards or converted to monitoring wells.

The No Project Alternative would not meet any of the project objectives, which are to conjunctively manage the South Westside Groundwater Basin through the coordinated use of SFPUC surface water and groundwater pumped by the Partner Agencies; provide supplemental SFPUC surface water to the Partner Agencies in normal and wet years; increase the dry-year and emergency pumping capacity of the South Westside Groundwater Basin by an average annual 7.2 mgd; and provide a new dry-year groundwater supply for the SFPUC's customers and increased water supply reliability during the 8.5-year design drought cycle.

Under the No Project Alternative, regional water system customers would experience water shortages and need to implement water rationing more frequently and water rationing would be more severe, exceeding the 20 percent systemwide rationing expected under full implementation of the WSIP projects. Wholesale customers would likely pursue other dry year supply projects, but numerous hurdles would need to be overcome:

- Water demand among customers is highest when supplies are most constrained and therefore more difficult to secure.
- Major new water supply projects can take 20-25 years to complete, so pursuit of other projects would likely not avoid increased water shortages and water rationing.
- The SFPUC wholesale customers already have planned for and adopted increased water conservation and recycling initiatives, making greater efforts in these regards more difficult.

The No Project Alternative would fail to meet the WSIP goals and objectives that rely directly on the contribution of the Project to fulfill systemwide level of service objectives. If the Project is not constructed, the SFPUC's water supply portfolio would not include 7.2 mgd of dry-year supply from the South Westside Groundwater Basin or provide for an alternative local supply in the event of emergency conditions. As a result, the No Project Alternative would fail to meet dry-year delivery needs identified in the WSIP while limiting rationing to a maximum 20 percent systemwide. It would also result in a less diversified water supply during dry-years than would be achieved with the GSR Project.

The No Project Alternative would avoid all of the construction impacts identified for the GSR Project, including the significant and unavoidable impacts associated with noise, land use, and aesthetics. It would also avoid all construction and operation-related impacts that can be reduced to a less-than-significant level with the implementation of mitigation measures, including in the areas of land use, aesthetics, cultural resources, transportation and circulation, noise and vibration, air quality, recreation, utilities and service systems, biological resources, geology and soils, hydrology and water quality, and hazards and hazardous materials.

In the absence of the dry-year water supply that the Project would provide, under the No Project alternative the SFPUC or its wholesale customers or both would likely take action to secure supplemental dry-year supply, which could have similar or additional secondary environmental effects as the Project. Supplemental dry-year supply options could include additional Tuolumne River diversions and water

transfers from the Turlock Irrigation District or the Modesto Irrigation District, increased groundwater use, additional water conservation and water recycling and desalination projects. The WSIP PEIR evaluated the environmental effects of such projects as part of the WSIP alternatives. Secondary effects could include: construction impacts and operational impacts such as groundwater overdraft, subsidence, seawater intrusion, and water quality effects associated with development of groundwater sources; impacts on fisheries and biological resources, including sensitive species, associated with additional Tuolumne River diversions; and construction impacts and operational impacts on land use, aesthetics, hydrology and water quality, air quality, hazards, and energy associated with the development desalinated water supplies.

The Commission rejects the No Project Alternative as infeasible because it would not meet any of the project objectives, and it would jeopardize the SFPUC's ability to meet the adopted WSIP goals and objectives as set forth in SFPUC Resolution No. 08-0200. Further, its secondary effects would likely result in similar impacts to those of the Project. Thus, the No Project Alternatives may not result in fewer environmental impacts than the Project, given that all Project impacts can be mitigated to less than significant levels with the exception of temporary construction-related impacts on land use, temporary construction noise impacts, and aesthetic impacts due to removal of trees at one location.

Alternative 2A: Reduce Lake Merced Impacts and Maintain Project Yield

Under Alternative 2A, the same facilities would be constructed as for the Project, except the SFPUC would construct only 14 wells and well facilities instead of 16 wells by not constructing a well or well facility at Site 1 in Daly City or Site 4 in unincorporated Broadmoor. Without wells at Sites 1 and 4, pumping would be reduced by approximately 1.0 mgd. To maintain the overall yield of 7.2 mgd, pumping would be redistributed to 11 wells at Sites 5 through 15. Pumping at each of Sites 5 through 15 would increase by approximately 20 percent compared to the proposed Project and production rates at Sites 5 through 15 could support this increased pumping. Pumping at Sites 2 and 3 would not increase under this alternative to minimize impacts on Lake Merced as compared to the proposed Project. Pumping at Site 16 also would not increase because groundwater availability is restricted at this location. Under this alternative, pumping near Lake Merced would decrease by approximately 54 percent when compared to the Project.

Alternative 2A would meet all of the Project Objectives, including increasing the dry-year and emergency pumping capacity of the South Westside Groundwater Basin by an average annual 7.2 mgd in the event of a 8.5-year design drought. It would have the same construction-related impacts as the proposed Project except that all impacts associated with construction at Sites 1 and 4 would be avoided. As a result, the significant and unavoidable construction-related noise impacts associated with exceeding local noise standards and increasing ambient noise levels, and the disruption of residential land uses from nighttime noise at these two sites would not occur.

The main difference between this Alternative 2A and the Project in terms of environmental effects is that by reducing pumping by 54 percent in the Lake Merced area, this alternative would decrease the decline in Lake Merced levels by a similar 54 percent. With the Project, lake levels after the end of the design

drought are expected to drop to four feet lower than under modeled existing conditions. With Alternative 2A, lake levels would be expected to drop two feet lower than under modeled existing conditions. The Project identifies mitigation in the form of lake monitoring, provision of supplemental water or altering of pumping to mitigate Project impacts. Similar mitigation still would be needed with Alternative 2A, but this alternative would not require the same degree of mitigation because the effects of Alternative 2A on Lake Merced levels would be about half as severe as with the Project. Although the Project would fully mitigate impacts to Lake Merced, it would require greater mitigation in the form of additional supplemental water, redistributed pumping or discontinued pumping as compared to Alternative 2A. Eliminating other wells would not further reduce impacts on Lake Merced water levels because other wells are too far from the lake to have a substantial influence on lake levels.

Other operational impacts with Alternative 2A would be nearly the same as for the proposed Project. Although pumping near Lake Merced would decline, this decline in pumping would be offset by increased pumping at Sites 5 through 15. As a result, the less-than-significant impact on irrigation wells at the Olympic Club and San Francisco Golf Club would be further reduced; Lake Merced Golf Club would continue to experience significant but mitigable impacts to its irrigation wells, and the nine cemeteries and California Golf Club in the Colma area would experience a 20 percent increase in well interference impacts. As for the Project, these well interference impacts would be significant but mitigable, but greater mitigation actions may be needed to fully mitigation impacts as compared to the Project. Other operational impacts associated with the Project, including subsidence potential, seawater intrusion, and effects on water quality and groundwater depletion, would be similar for Alternative 2A and the Project.

The Commission rejects Alternative 2A as infeasible for several reasons. First, it does not provide an appreciable environmental benefit as compared to the Project. While it eliminates all of the construction-related impacts associated with Sites 1 and 4, including the significant and unavoidable construction-related noise and land use impacts, these construction-related impacts are temporary, occurring over approximately seven nights of well drilling, and would not result in any permanent environmental effect. Alternative 2A reduces the need for mitigation associated with maintaining Lake Merced levels, but these impacts are mitigable under mitigation measures identified in the EIR and which the SFPUC proposes to adopt. By moving pumping away from Lake Merced further to the south, it has a greater impact on irrigation wells and cemeteries in the Colma area. These increased well interference impacts also are mitigable but Alternative 2A would trigger the need for greater mitigation of well interference impacts as compared to the Project. The overall effect of Alternative 2A is to decrease Lake Merced level impacts at the expense of increasing well interference impacts in the Colma area, and eliminating temporary construction noise and associated land use disruption impacts at two sites.

Further, while Alternative 2A would decrease some project costs due to elimination of Sites 1 and 4, there would be an associated increase in other costs at Sites 5 through 15 for larger pumps, piping and treatment equipment to accommodate the increased pumping at these sites. Well interference mitigation costs would be increased because Alternative 2A would trigger the need for mitigation earlier and more often as compared to the Project due to the increased pumping at Sites 5 through 15. Finally, reducing the number of wells from 16 to 14 would reduce operational flexibility in the event of planned or unplanned

maintenance needs. With two fewer wells operating, the ability to reallocate pumping or rotate pumping without reducing pumping quantity would be more difficult. In sum, Alternative 2A would reduce operational flexibility in the event of planned or unplanned Project maintenance need, increase well interference mitigation costs, and fail to provide an appreciable environmental benefit as compared to the Project.

Alternative 2B

Under Alternative 2B, the same facilities would be constructed as for the Project, except the SFPUC would construct only 14 wells and well facilities instead of 16 wells by not constructing a well or well facility at Site 1 in Daly City or Site 4 in unincorporated Broadmoor. Without wells at Sites 1 and 4, pumping would be reduced by approximately 1.0 mgd. Unlike Alternative 2A, pumping lost from not constructing wells at Sites 1 and 4 would not be redistributed.

Alternative 2B would meet most, but not all, of the Project objectives. It would not meet the objective of increasing the SFPUC's dry-year and emergency pumping capacity by 7.2 mgd during an 8.5-year drought. Instead, it would provide 6.2 mgd during an 8.5-year drought. It would meet the other project objectives of providing for the conjunctive use of the South Westside Groundwater Basin and supplemental SFPUC surface water to Partner Agencies during normal and wet years to allow for in-lieu recharge of the Basin, but at a level reduced by 1 mgd as compared to the Project. The reduction in yield with Alternative 2B would limit the regional water system's ability to meet the WSIP goal of seismic and delivery reliability, adopted as part of the approval of the WSIP under SFPUC Resolution 08-0200. The SFPUC per the adopted resolution will reevaluate 2030 demand projections, regional water system purchase requests, and water supply options by 2018. With the reduction in yield from this alternative, the SFPUC may need to revise the WSIP goals and objectives or develop additional water supply projects depending on demand projections. Alternatively, the SFPUC's wholesale customers could decide to pursue additional projects such as water transfer to increase dry-year and emergency pumping capacity to achieve a yield of 7.2 mgd as called for by the adopted WSIP.

Alternative 2B would have the same construction-related effects as Alternative 2A – it would eliminate all less-than-significant, significant and mitigable, and significant and unavoidable impacts of construction associated with Sites 1 and 4. It would also have the same impacts on Lake Merced as Alternative 2A – it would reduce lake level decline by 54 percent as compared to the Project. Unlike Alternative 2A, it would not redistribute the pumping lost by not installing wells at Sites 1 and 4. Consequently, the well interference impacts of Alternative 2B would be less than the Project at the Lake Merced Golf Club, Olympic Club and San Francisco Golf Club, but would not change the significance conclusions. Well interference impacts at the Olympic Club and the San Francisco Golf Club would be less-than-significant under both the Project and Alternative 2B; likewise, the well interference impact at Lake Merced Golf Club would be significant but mitigable under both the Project and Alternative 2B. Other operational impacts - land subsidence and sea water intrusion – would be reduced as compared to the Project, but as they were less-than-significant under the Project, the significance determination would remain unchanged. Likewise, Alternative 2B would decrease, but result in the same significance determination for groundwater depletion impacts as the Project, with such impacts remaining significant

but mitigable. Impacts on water quality would remain the same, less-than-significant, with Alternative 2B as for the Project.

The main difference between Alternative 2B and the Project in terms of environmental effects is that by reducing pumping by 54 percent in the Lake Merced area it would decrease the decline in Lake Merced levels by a similar 54 percent. With the Project, lake levels after the end of the design drought are expected to drop to four feet lower than under modeled existing conditions. With Alternative 2B, lake levels would be expected to drop two feet lower than under modeled existing conditions. The Project identifies mitigation in the form of lake monitoring, provision of supplemental water or altering of pumping to mitigate Project impacts. Similar mitigation still would be needed with Alternative 2B, but this alternative would not require the same degree of mitigation because the effects of Alternative 2B on Lake Merced levels would be about half as severe as with the Project. The Project would fully mitigate impacts to Lake Merced, but it would require greater mitigation - additional supplemental water, redistributed pumping or discontinued pumping - as compared to Alternative 2B. Eliminating other wells would not further reduce impacts on Lake Merced water levels because other wells are too far from the lake to have a substantial influence on lake levels.

Environmentally Superior Alternative. The CEQA Guidelines require the identification of an environmentally superior alternative to the proposed project and if it is determined to be the No Project Alternative, then the EIR must identify an environmentally superior alternative among the other Project alternatives. (CEQA Guidelines Section 15126.6(e).) The EIR identified Alternative 2B as the environmentally superior alternative. Some impacts associated with Alternative 2B while initially less intense than those of the Project (well interference, groundwater depletion), with mitigation, the resulting impact level would be the same under Alternative 2B and the Project (less-than-significant with mitigation). But, Alternative 2B would eliminate construction impacts at two sites, Sites 1 and 4, and reduce impacts on Lake Merced level declines by 54 percent. Although the Project would fully mitigate impacts to Lake Merced, it would require greater mitigation in the form of additional supplemental water, redistributed pumping or discontinued pumping as compared to Alternative 2B. Greater costs would be associated with this mitigation, although these costs may be offset by savings associated with not constructing facilities at Sites 1 and 4.

The Commission rejects Alternative 2B as infeasible. It would not meet the objective of increasing the SFPUC's dry-year and emergency pumping capacity by 7.2 mgd during an 8.5-year drought. Instead, it would provide 6.2 mgd during an 8.5-year drought. It would meet the other project objectives of providing for the conjunctive use of the South Westside Groundwater Basin and supplemental SFPUC surface water to Partner Agencies during normal and wet years to allow for in-lieu recharge of the Basin, but at a level reduced by 1 mgd as compared to the Project. The reduction in yield with Alternative 2B would limit the regional water system's ability to meet the WSIP goal of seismic and delivery reliability, adopted as part of the approval of the WSIP under SFPUC Resolution 08-0200. With the reduction in yield from this alternative, the SFPUC may need to revise the WSIP goals and objectives or develop additional water supply projects depending on demand projections.

While Alternative 2B eliminates construction impacts at Sites 1 and 4, including the significant and unavoidable construction-related noise and land use impacts, these construction-related impacts are temporary, occurring over approximately seven nights of well drilling, and would not result in any permanent environmental effect. Alternative 2B reduces the need for mitigation associated with maintaining Lake Merced levels, but these impacts are mitigable under mitigation measures identified in the EIR and which the SFPUC proposes to adopt.

Alternative 3A

Alternative 3A was selected for analysis because it would reduce the significant well interference impacts of the Project during dry years at existing irrigation wells that are located at the Colma-area cemeteries. Under Alternative 3A, the same facilities would be constructed as for the Project, except the SFPUC would construct only 14 wells and well facilities instead of 16 wells by not constructing a well or well facility at Sites 7 and 8 in Colma. Without wells at Sites 7 and 8, pumping would be reduced by approximately 1.2 mgd, decreasing pumping in the Colma area by approximately 32 percent. To maintain the overall yield of 7.2 mgd, pumping would be redistributed to nine wells at Sites 1 through 4 and Sites 11 through 15. Pumping at each of these sites would increase by approximately 31 percent as compared to the proposed Project; production rates at Sites 5 through 15 could support this increased pumping. Pumping at Sites 5, 6, 9, and 10 would remain the same, as they are in the Colma area; pumping at Site 16 also would not increase because groundwater availability is restricted at this location.

Alternative 3A would fully meet the Project Objectives, including increasing the dry-year and emergency pumping capacity of the South Westside Groundwater Basin by an average annual 7.2 mgd in the event of a 8.5 year design drought. It would have the same construction-related impacts as the proposed Project except that all impacts associated with construction at Sites 7 and 8 would be avoided. As a result, all impacts that are less-than-significant and less-than-significant with mitigation at either site would be avoided as would the significant and unavoidable construction-related aesthetic impact as Site 7. This latter impact is the result of the need to remove trees associated with a designated tree mass in the Town of Colma General Plan and the fact that despite the adoption of mitigation to replace trees, these trees include eucalyptus trees on SFPUC's right-of-way, the presence of which conflicts with the SFPUC's vegetation management policy for its right-of-way. While SFPUC will work with the Town of Colma to find replacement trees off-site, Site 7 will be aesthetically altered.

The intensity of well interference impacts on existing irrigation wells in the Colma area before mitigation would be reduced as a result of a 32 percent reduction in pumping near these wells. However, well interference impacts with the implementation of mitigation would be less-than-significant for both Alternative 3A and the proposed Project. Potential impacts on Lake Merced water levels would be slightly greater for Alternative 3A than for the Project prior to mitigation, but with mitigation, both would result in less-than-significant impacts on the water quality of Lake Merced. But, under Alternative 3A, more supplemental water, redistribution of pumping, or discontinued pumping would be required to mitigate such impacts as compared to the proposed Project. Potential impacts on groundwater quality and groundwater depletion would be the same for the proposed Project and Alternative 3A. The potential for

subsidence impacts and for seawater intrusion would be slightly greater for Alternative 3A when compared to the proposed Project but would be less-than-significant as for the proposed Project.

The Commission rejects Alternative 3A as infeasible. First, it does not provide an appreciable environmental benefit as compared to the Project. It results in similar environmental impacts as with the Project after the application of mitigation measures. The main differences between Alternative 3A and the Project is that Alternative 3A eliminates the significant and unavoidable aesthetic impact associated with removal of trees in the SFPUC right-of-way at Site 7, increases impacts associated with Lake Merced levels and decreases the impacts associated with well interference in the Colma area. As a result, Alternative 3A increases the amount of mitigation associated with maintaining Lake Merced levels, including the need to secure supplemental water, reduce pumping or redistribute pumping to reduce the effect of the Project on Lake Merced levels. But, the resulting impacts to Lake Merced levels after implementation of mitigation measures identified in the EIR, which the SFPUC proposes to adopt, would be the same for Alternative 3A and the Project. By moving pumping away from the Colma area, Alternative 3A reduces well interference impacts, but these impacts also are mitigable, so the main effect is to increase the amount of required mitigation associated with maintaining Lake Merced levels. After mitigation, Alternative 3A and the Project result in the same mitigated impact associated with well interference.

Further, while Alternative 3A would decrease some project costs due to elimination of Sites 7 and 8, it would increase other project costs associated with Sites 1 through 4 and Sites 11 through 15 due to the need for larger pumps, piping and treatment equipment to accommodate the increased pumping at these sites. Also, Lake Merced mitigation costs would be increased because mitigation would be triggered earlier and more often due to the increased pumping at Sites 5 through 15. Finally, by reducing the number of wells from 16 to 14, Alternative 3A would reduce operational flexibility as compared to the Project in the event of planned or unplanned maintenance. With two fewer wells operating, the ability to reallocate pumping or rotate pumping without reducing pumping quantity would be more difficult. In sum, Alternative 3A would reduce operational flexibility in the event of planned or unplanned Project maintenance need, increase mitigation costs associated with maintaining Lake Merced levels, and not provide an appreciable environmental benefit as compared to the Project.

Alternative 3B

Alternative 3B was selected for analysis because it would reduce the significant well interference impacts of the Project during dry years at existing irrigation wells that are located at the Colma-area cemeteries. Under Alternative 3B, the same facilities would be constructed as for the Project, except the SFPUC would construct only 14 wells and well facilities instead of 16 wells by not constructing a well or well facility at Sites 7 and 8 in Colma. Without wells at Sites 7 and 8, pumping would be reduced by approximately 1.2 mgd, decreasing pumping in the Colma area by approximately 32 percent.

Alternative 3B would meet most but not all, of the Project goals and objectives. Alternative 3B would not fully meet the Project goal to provide 7.2 mgd of water for new dry-year water supply for the SFPUC and Partner Agencies because Alternative 3B would reduce the number of well and reduce the dry-year

and emergency pumping capacity to 6.0 mgd. This alternative would partially support the WSIP goals and objectives to provide dry-year and emergency water pumping capacity. However, additional measures may be necessary to fully provide the dry-year and emergency water pumping volume required in order to meet the WSIP goal of limiting rationing to a systemwide maximum of 20 percent during an 8.5-year drought.

It would have the same construction-related impacts as the proposed Project except that all impacts associated with construction at Sites 7 and 8 would be avoided. As a result, all impacts that are less-than-significant and less-than-significant with mitigation at either site would be avoided as would the significant and unavoidable construction-related aesthetic impact as Site 7. This latter impact is the result of the need to remove trees associated with a designated tree mass in the Town of Colma General Plan and the fact that despite the adoption of mitigation to replace trees, these trees include eucalyptus trees on SFPUC's right-of-way, the presence of which conflicts with the SFPUC's vegetation management policy for its right-of-way. While SFPUC will work with the Town of Colma to find replacement trees off-site, Site 7 will be aesthetically altered.

This alternative would decrease pumping near the Colma area by approximately 32 percent. Operational impacts would be similar to those expected for the proposed Project. The expected groundwater levels would still result in the potential for well interference impacts as would the proposed Project and these impacts, in most cases, are similar to those that would occur with the proposed Project. With mitigation, the well interference impacts would be reduced to less than significant levels under both the Project and Alternative 3B. Alternative 3B would reduce the potential for subsidence and seawater intrusion; however, both the proposed Project and Alternative 3B would result in less than significant subsidence and seawater intrusion impacts. Potential impacts on groundwater quality would be the same for the proposed Project and the alternative. Potential impacts related to groundwater depletion would be similar for both the Project and this alternative.

The Commission rejects Alternative 3B as infeasible. Alternative 3B does not fully meet project objectives. It would not meet the objective of increasing the SFPUC's dry-year and emergency pumping capacity by 7.2 mgd during an 8.5-year drought. Instead, it would provide 6.0 mgd during an 8.5-year drought. It would meet the other project objectives of providing for the conjunctive use of the South Westside Groundwater Basin and supplemental SFPUC surface water to Partner Agencies during normal and wet years to allow for in-lieu recharge of the Basin, but at a level reduced by 1.2 mgd as compared to the Project. The reduction in yield with Alternative 3B would limit the regional water system's ability to meet the WSIP goal of seismic and delivery reliability, adopted as part of the approval of the WSIP under SFPUC Resolution 08-0200. With the reduction in yield from this alternative, the SFPUC may need to revise the WSIP goals and objectives or develop additional water supply projects depending on demand projections.

Further, it does not provide an appreciable environmental benefit as compared to the Project. It results in similar environmental impacts as with the Project after the application of mitigation measures. The main differences between Alternative 3B and the Project is that Alternative 3B eliminates the significant and unavoidable aesthetic impact associated with removal of trees in the SFPUC right-of-way at Site 7,

increases impacts associated with Lake Merced levels and decreases the impacts associated with well interference in the Colma area. As a result, Alternative 3B increases the amount of mitigation associated with maintaining Lake Merced levels, including the need to secure supplemental water, reduce pumping or redistribute pumping to reduce the effect of the Project on Lake Merced levels. But, the resulting impacts to Lake Merced levels after implementation of mitigation measures identified in the EIR, which the SFPUC proposes to adopt, would be the same for Alternative 3B and the Project. By moving pumping away from the Colma area, Alternative 3B reduces well interference impacts, but these impacts also are mitigable, so the main effect is to increase the amount of required mitigation associated with maintaining Lake Merced levels. After mitigation, Alternative 3B and the Project result in the same mitigated impact associated with well interference.

In sum, Alternative 3B does not fully meet Project or WSIP goals and objectives and does not provide an appreciable environmental benefit to the Project. With the reduction in yield from this alternative, the SFPUC may need to revise the WSIP goals and objectives or develop additional water supply projects depending on demand projections.

VI. Statement of Overriding Considerations

Pursuant to CEQA Section 21081 and CEQA Guidelines Section 15093, the Commission hereby finds, after consideration of the Final EIR and the evidence in the record, that each of the specific overriding economic, legal, social, technological and other benefits of the Project as set forth below, independently and collectively outweighs the significant and unavoidable impacts and is an overriding consideration warranting approval of the project. Any one of the reasons for approval cited below is sufficient to justify approval of the project. Thus, even if a court were to conclude that not every reason is supported by substantial evidence, the Commission will stand by its determination that each individual reason is sufficient. The substantial evidence supporting the various benefits can be found in the preceding findings, which are incorporated by reference into this section, and in the documents found in the Record of Proceedings, as defined in Section I.

On the basis of the above findings and the substantial evidence in the whole record of this proceeding, the Commission specifically finds that there are significant benefits of the project in spite of the unavoidable significant impacts, and therefore makes this Statement of Overriding Considerations. The Commission further finds that, as part of the process of obtaining Project approval, all significant effects on the environment from implementation of the project have been eliminated or substantially lessened where feasible. All mitigation measures proposed in the Final EIR for the project are adopted as part of this approval action. Furthermore, the Commission has determined that any remaining significant effects on the environment found to be unavoidable are acceptable due to the following specific overriding economic, technical, legal, social, and other considerations.

- The Project will further a number of the WSIP goals and objectives. As part of the approval of WSIP by Resolution 08-2000, the SFPUC adopted a Statement of Overriding Considerations as to why the benefits of the WSIP outweighed the significant and unavoidable impacts associated with the WSIP. The WSIP Statement of Overriding Considerations is relevant to the significant

and unavoidable impacts of the GSR Project as it will further WSIP goals and objectives, as well as the GSR Project's contribution to the WSIP's significant and unavoidable indirect effects related to growth. The findings regarding the Statement of Overriding Considerations set forth in Resolution No. 08-2000 are incorporated into these findings by this reference, as though fully set forth in these CEQA Findings.

- The GSR Project will provide a substantial amount of the dry-year supply that the SFPUC calculates it will need under a long-term drought scenario. The Project will provide an average annual 7.2 mgd of new dry-year groundwater supply for the SFPUC's customers. The SFPUC's WSIP, adopted by the SFPUC in 2008, identifies a goal of limiting rationing in a drought to a maximum of 20 percent for the 2.46 million persons in San Francisco, San Mateo, Santa Clara, Alameda and Tuolumne counties served by the SFPUC's regional water system. The WSIP identified a reasonable worse case drought scenario as one that would last 8.5 years. The WSIP identified two projects that would assist in limiting rationing to 20 percent during a drought - the GSR Project, which would provide 7.2 mgd of groundwater, and dry-year water transfers of about 2 mgd from the Modesto or Turlock Irrigation Districts. The GSR Project is critical to the ability of the SFPUC to implement its WSIP dry-year water supply strategy.
- The conjunctive management of the South Westside Groundwater Basin, as proposed with the Project, will make more dry-year water available to the SFPUC Regional System without the environmental impacts associated with building a new storage facility and without impacting other water supplies. The conjunctive management of the South Westside Groundwater Basin provides for groundwater to accumulate in the basin during normal and wet years when the SFPUC can provide surface water to Partner Agencies, and for SFPUC and Partner Agencies to extract the accumulated groundwater during dry years. The Project achieves a 7.2 mgd increase in water supply during an 8.5-year design drought while having no impact on meeting Partner Agencies' water needs during normal and wet years. Because storage space is already available in the South Westside Groundwater Basin, the project is able to make use of the groundwater storage space without the need to construct an entirely new water storage system and incur the environmental impacts associated with such construction and operation. With the exception of an aesthetic impact at one site related to tree removal, and noise and land use impacts on residences associated with temporary construction-related noise, the Project will be able to mitigate the direct environmental impacts associated with its construction and operation, including any potential impact to water needs of overlying irrigators.
- The SFPUC WSIP identifies the goal of reducing vulnerability to earthquakes. It establishes an objective of delivering basic service to three regions in the SFPUC service area – East/South Bay, Peninsula, and San Francisco within 24 hours after a major earthquake. The performance objective is to deliver 104 mgd to the East/South Bay, 44 mgd to the Peninsula, and 81 mgd to San Francisco. The GSR Project will make up to 7.2 mgd of local groundwater supply available for delivery in the event of an emergency such as an earthquake.

- The WSIP aims to substantially improve use of new water supply and drought management, including use of groundwater, recycled water, conservation, and transfers. The GSR Project is important to meeting the WSIP goal of providing improved use of new water supply, because it will provide up to 7.2 mgd of local groundwater during drought and emergency periods.
- The WSIP projects are designed to meet applicable federal and state water quality requirements. This Project will further this objective as the EIR for the Project determined that the Project would have no significant impact on water quality and would not degrade drinking water.

Having considered these benefits, including the benefits discussed in Section I above, the Commission finds that the benefits of the Project and the Project's furtherance of the WSIP goals and objectives outweigh the unavoidable adverse environmental effects, and that the adverse environmental effects are therefore acceptable.

DECISION

That based upon the Record, the submissions of the SFPUC, the Department and SFPUC staff, and other interested parties, the oral testimony presented to this Commission at the public hearings, and all other written materials submitted by all parties, the Commission hereby **ADOPTS** findings under the California Environmental Quality Act, including rejecting alternatives as infeasible, adopting a Statement of Overriding Considerations, and **ADOPTS** a Mitigation Monitoring and Reporting Program, attached as **Exhibit 1**.

I hereby certify that the Planning Commission ADOPTED the foregoing Motion on August 7, 2014.

Jonas P. Ionin
Commission Secretary

AYES:

NAYES:

ABSENT:

ADOPTED:

EXHIBIT 1
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
LAND USE AND LAND USE PLANNING						
LU-1	Project construction would have a substantial impact on the existing character of the vicinity and could substantially disrupt or displace existing land uses or land use activities.	<p>M-LU-1: Maintain Internal Cemetery Access (Site 7 [Consolidated Treatment at Site 6] and Site 14).</p> <p>Prior to commencing construction at either Site 7 (where treatment for Site 7 is consolidated at Site 6) or at Site 14, the SFPUC or its construction contractor shall develop an access plan to be implemented during construction to ensure that access is available for visitors to all portions of the Woodlawn Memorial Park and Golden Gate National Cemetery within a reasonable period of time upon their arrival at the cemetery. The access plan shall include, for example, trench plating and alternative routing for visitors. The plan shall also address measures to maintain access for cemetery operations and maintenance. A copy of the access plan shall be submitted to the owner or operator of the Woodlawn Memorial Park and the Golden Gate National Cemetery prior to commencing construction, and they also shall be provided with the name of, and contact information for, a person identified to act as a liaison during construction at these sites.</p>	<ol style="list-style-type: none"> SFPUC EMB/CMB SFPUC CMB SFPUC CMB 	<ol style="list-style-type: none"> SFPUC BEM SFPUC BEM SFPUC BEM 	<ol style="list-style-type: none"> If consolidated treatment at Site 6 is selected for Site 7, ensure that contract documents include requirement for contractor to develop Access Plans for Sites 7 and 14 and submit to Woodlawn Memorial Park and Golden Gate National Cemetery, respectively. If consolidated treatment at Site 6 is selected for Site 7, ensure that Contractors Site 7 and Site 14 Access Plans are completed and submitted to Woodlawn Memorial Park and Golden Gate National Cemetery as required. Designate construction period liaison. 	<ol style="list-style-type: none"> Design Construction Construction
AESTHETICS						
AE-1	Project construction would have a substantial adverse impact on a scenic vista, resource, or on the visual character of a site or its surroundings.	<p>M-AE-1a: Site Maintenance (Sites 4, 7, 12, 13, 14, 15, and 18 [Alternate])</p> <p>The SFPUC shall require the contractor to ensure that construction-related activity is as clean and inconspicuous as practical by storing construction materials and equipment at areas of the construction site that are generally away from public view, and by removing construction debris promptly at regular intervals.</p>	<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 requirement for contractor to store material and equipment away from public view and properly removing construction debris at regular intervals. Monitor to ensure that the contractor implements requirements. Report noncompliance and ensure corrective action. 	<ol style="list-style-type: none"> Design Construction
AE-1 (cont.)	Project construction would have a substantial adverse impact on a scenic vista, resource, or on the visual character of a site or its surroundings.	<p>M-AE-1b: Tree Protection Measures (Sites 3, 4, 7, 10, 11, 12, 13, 14, 15, and 17 [Alternate])</p> <p>The SFPUC shall identify trees to be protected and retained during construction and minimize potential impact to these trees by implementing the following measures:</p> <ul style="list-style-type: none"> Construction activities within the dripline of trees to be retained adjacent to construction area boundaries or adjacent to pipeline routes shall be avoided. A qualified arborist shall identify the location of exclusion fencing to be installed around trees to be retained. Prior to the start of construction, the SFPUC or its contractor shall install exclusion fencing around the dripline of trees to be retained and within 50 feet of any grading or construction activity. Prior to construction, the SFPUC shall verify that the temporary construction fencing is installed and approved by a qualified arborist. Any encroachment within these areas must first be approved by a qualified arborist and the SFPUC. Temporary fencing shall be continuously maintained by the contractor until all construction activities near the trees are completed. No construction activities shall occur within the exclusion fencing. For trees on slopes, exclusion fencing shall consist of a silt fence that will be installed at the upslope base of the tree to prevent soil from moving into the root zone (defined as the extent of the tree dripline) if work is performed upslope of any protected trees. Pruning of trees to be retained shall be completed by either a certified arborist or by the contractor under supervision of either an International Society of Arboriculture qualified arborist, American Society of Consulting Arborists consulting 	<ol style="list-style-type: none"> SFPUC EMB SFPUC CMB (qualified arborist) 	<ol style="list-style-type: none"> SFPUC BEM SFPUC BEM 	<ol style="list-style-type: none"> Ensure that the contract documents include the listed tree protection measures, including requirement for contractor to provide a qualified arborist and identify trees to be protected, specifically at Sites 3, 4, 7, 10, 11, 12, 13, 14, 15, and 17 [Alternate]. Monitor to ensure that contractor implements measures. Report noncompliance and ensure corrective action. 	<ol style="list-style-type: none"> Design Pre-construction/ Construction

EXHIBIT 1 (continued)

REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		arborist, or a qualified horticulturalist.				
AE-1 (cont.)	Project construction would have a substantial adverse impact on a scenic vista, resource, or on the visual character of a site or its surroundings.	<p>M-AE-1c: Develop and Implement a Tree Replanting Plan (Site 12)</p> <p>The SFPUC shall develop and implement a tree replanting plan to address the removal of trees along El Camino Real at Site 12. The tree replanting plan shall include planting locations (which may include non-SFPUC properties), native tree and shrub species (consistent with those near the well facility site), planting ratios, and irrigation requirements. Tree replanting activities occurring on SFPUC properties or right-of-way shall be consistent with the requirements of the SFPUC's Integrated Vegetation Management Policy (SFPUC 2007). The planting ratio for replacement trees shall be a minimum of 1:1, or in substantial compliance with the City of South San Francisco's tree preservation ordinance (Chapter 13.30.080, Replacement of Protected Trees). Replanting shall occur the first year after completion of construction. The SFPUC shall monitor the replacement trees annually for five years after project completion to ensure that the trees survive; if necessary, the SFPUC shall implement additional measures, such as replanting for trees that did not survive.</p>	<ol style="list-style-type: none"> 1. SFPUC EMB 2. SFPUC EMB 3. SFPUC CMB 4. SFPUC Water Enterprise, WST 	<ol style="list-style-type: none"> 1. SFPUC Water Enterprise, WRD 2. SFPUC BEM 3. SFPUC BEM 4. SFPUC Water Enterprise, WRD 	<ol style="list-style-type: none"> 1. Develop Tree Replanting Plan 2. Ensure that contract documents include the listed tree replanting requirements plan for site 12. 3. Monitor to ensure that contractor implements measures in contract documents. Report noncompliance, and ensure corrective action. 4. Perform annual tree replacement monitoring. 	<ol style="list-style-type: none"> 1. Design 2. Design 3. Construction 4. Post-Construction Monitoring (at least five years, depending on success)
AE-1 (cont.)	Project construction would have a substantial adverse impact on a scenic vista, resource, or on the visual character of a site or its surroundings.	<p>M-AE-1d: Construction Area Screening (Site 15)</p> <p>The SFPUC and its contractors shall screen the construction area at the facility site at Site 15. Screening shall be designed to minimize view of construction equipment and construction activities from views from Sneath Lane and the surrounding areas. Vehicles and other construction equipment shall be parked in the screened construction area at night and when equipment is not actively being used for pipeline construction along Sneath Lane.</p>	<ol style="list-style-type: none"> 1. SFPUC EMB 2. SFPUC CMB 	<ol style="list-style-type: none"> 1. SFPUC BEM 2. SFPUC BEM 	<ol style="list-style-type: none"> 1. Ensure that contract documents include requirement for construction screening for Site 15. 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
AE-1 (cont.)	Project construction would have a substantial adverse impact on a scenic vista, resource, or on the visual character of a site or its surroundings.	<p>M-AE-1e: Tree Removal and Replacement (Site 7)</p> <p>Prior to the removal of any trees within the construction area boundary at Site 7, the SFPUC shall determine if any trees within the Town-designated tree mass can be retained without causing conflicts with construction equipment and/or safety risks during construction at this site. A qualified arborist shall conduct the tree retention survey. Any trees found not to conflict with construction activities or create a safety risks shall be protected during construction.</p> <p>For each tree to be removed, the SFPUC shall plant replacement trees on-site to the extent allowable by its Integrated Vegetation Management Policy (Section 13.006) (SFPUC 2007). Each replacement tree shall be in a minimum 15-gallon container and shall be of species listed in the vegetation management policy. The on-site plantings shall be located such that the visual continuity of the existing tree mass is restored to the extent feasible. To the extent tree replacement on-site is not feasible, replacement trees shall be planted off-site in substantial compliance with the Town of Colma's Tree Cutting and Removal ordinance.</p> <p>In all cases, the planting ratio shall be a minimum of 1:1 (i.e., one tree planted for each tree removed). Replanting shall occur within the first year after completion of construction. The SFPUC shall monitor plantings annually for five years after project completion to ensure that the replacement planting(s) has developed and that the trees survive. If necessary, the SFPUC shall implement additional measures (e.g., replanting, installation of irrigation) to address continued survival of the plantings, and shall re-plant additional trees should a significant amount of the original plantings not survive during the monitoring period.</p>	<ol style="list-style-type: none"> 1. SFPUC EMB 2. SFPUC Water Enterprise, WRD 3. SFPUC CMB 4. SFPUC Water Enterprise, WST 	<ol style="list-style-type: none"> 1. SFPUC BEM 2. Town of Colma 3. SFPUC BEM 4. SFPUC Water Enterprise, WRD 	<ol style="list-style-type: none"> 1. Ensure that contract documents include the listed requirements for a qualified arborist, tree retention survey, and on- and off-site tree planting for Site 7. 2. Approve off-site plantings. 3. Verify arborist's credentials. Monitor to ensure that contractor implements measures in contract documents. Report noncompliance, and ensure corrective action. 4. Perform annual tree replacement monitoring. 	<ol style="list-style-type: none"> 1. Design 2. Pre-Construction 3. Construction 4. Post-Construction Monitoring (at least five years, depending on success)
AE-3	Project operation would have a substantial adverse impact on a scenic	<p>M-AE-3a: Implement Landscape Screening (Sites 4, 7, and 18 [Alternate])</p> <p>The SFPUC shall develop and implement a landscape-screening plan to screen views of the well facility. The landscape plan</p>	<ol style="list-style-type: none"> 1. SFPUC EMB 2. SFPUC EMB 	<ol style="list-style-type: none"> 1. SFPUC Water Enterprise, WRD 2. SFPUC BEM 	<ol style="list-style-type: none"> 1. Develop Landscape Screening Plan 2. Ensure that contract documents include Landscape Screening Plan requirements 	<ol style="list-style-type: none"> 1. Design 2. Design

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
	vista, resource, or on the visual character of a site or its surroundings.	shall include native trees and shrubs common to the surrounding areas. The landscape plan shall include plant species, planting specifications, and irrigation requirements necessary to screen the well facility. The SFPUC shall monitor landscape plantings annually for five years after project completion to ensure that sufficient ground coverage has developed and that the shrubs survive. If necessary, the SFPUC shall implement additional measures (e.g., replanting, temporary irrigation) to address continued survival of the plantings, and shall replant additional shrubs should a significant amount of the plantings not survive during the monitoring period.	3. SFPUC CMB 4. SFPUC Water Enterprise, WST	3. SFPUC BEM 4. SFPUC Water Enterprise, WRD	for Sites 4, 7, and 18. 3. Monitor to ensure that contractor implements measures in contract documents. Report noncompliance, and ensure corrective action. 4. Perform annual tree replacement monitoring for at least 5 years.	3. Construction 4. Post-Construction Monitoring (at least five years, depending on success)
CULTURAL RESOURCES						
CR-1	Project construction could cause an adverse change in the significance of a historical resource.	<p>M-CR-1a: Minimize Construction-related Impacts to Elements of the Historical Resource at Site 14</p> <p>The SFPUC and its contractor shall implement the following measures during construction at Site 14 to protect elements of the historical resource:</p> <ul style="list-style-type: none"> The SFPUC shall lay plywood or other material down temporarily for access between the cemetery access road and the construction area during construction. Temporary protective barriers shall be constructed for protection of the headstones during construction, including those near the existing pump structure to be removed. Final plans and specifications shall be submitted to the VA prior to construction. Construction workers shall undergo a training program to be made aware of the importance of the site and the contributing elements of the historical resource that would be affected by the proposed work. The training program shall be approved by either a qualified historical architect or architectural historian. Through measurements and photographs, a historical architect shall document the roads and concrete curbs where trenching would occur. This documentation shall serve as a reference for replacing the curbs to match the existing curbs where removed for trenching. The SFPUC shall replace curbs removed for trenching with new curbs to match the existing curbs. Grass shall be restored where removed for trenching. 	1. SFPUC EMB 2. SFPUC EMB 3. SFPUC CMB/historical architect	1. SFPUC BEM/VA 2. SFPUC BEM 3. SFPUC BEM	1. Submit final plans and specifications to VA to obtain VA approval 2. Ensure that contract documents include historical protection measures for Site 14, including requirements for contractor to provide a qualified historical architect or architectural historian and provide a training program. 3. Verify credentials of historical architect or architectural historian. Monitor to ensure that contractor implements measures in contract documents. Report noncompliance, and ensure corrective action.	1. Pre-construction 2. Design 3. Construction
CR-1 (cont.)	Project construction could cause an adverse change in the significance of a historical resource.	<p>M-CR-1b: Minimize Construction-related Impacts on Elements of the Historical Resource at Site 15</p> <p>The SFPUC and its contractor shall implement the following measures during construction at Site 15 to protect elements of the historical resource:</p> <ul style="list-style-type: none"> Temporary protective barriers shall be constructed for protection of the adjacent building to the north during construction. Final plans and specifications shall be submitted to the VA prior to construction. Construction workers shall undergo a training program to be made aware of the importance of the building adjacent to Site 15 and the contributing elements of the historical resource that would be affected by the proposed work. The training program shall be approved by either a qualified historical architect or architectural historian. Through measurements and photographs, a historical architect shall document the roads and concrete curbs where trenching would occur. This documentation shall serve as a reference for replacing the curbs to match the existing curbs where removed for trenching. The SFPUC shall replace curbs removed for trenching with new curbs to match existing. Grass shall be restored where removed for trenching 	1. SFPUC EMB 2. SFPUC EMB 3. SFPUC CMB/historical architect	1. SFPUC BEM/VA 2. SFPUC BEM 3. SFPUC BEM	1. Submit final plans and specifications to VA to obtain VA approval. 2. Ensure that contract documents include historical protection measures for Site 15, including requirements for contractor to provide a qualified historical architect or architectural historian and provide a training program. 3. Verify credentials of historical architect or architectural historian. Monitor to ensure that contractor implements measures in contract documents. Report noncompliance, and ensure corrective action.	1. Pre-construction 2. Design 3. Construction

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
CR-2	Project construction could cause an adverse change in the significance of an archaeological resource.	<p>M-CR-2: Discovery of Archaeological Resources (All Sites except West Lake Pump Station)</p> <p><i>Archaeological Monitoring Program.</i> Despite the negative results of archaeological test investigations at Site 11, there is some potential that remnants of a known prehistoric archaeological site (CA-SMA-299) are located below the ground surface. Consequently, an archaeological monitoring plan shall be prepared and implemented for construction at Site 11. The monitoring plan shall specify the location and duration of monitoring activities and shall be subject to review by the Environmental Review Officer (ERO). The scope of the monitoring plan shall conform to MEA WSIP Archaeological Guidance No. 4.</p> <p><i>Accidental Discovery.</i> To avoid potential adverse effects on accidentally discovered archaeological resources, the SFPUC shall distribute the San Francisco Planning Department’s archaeological resource “ALERT” sheet to: the Project prime contractor; any subcontractors (including firms subcontracted to perform demolition, excavation, grading, foundation, pile driving, etc.); and/or any utilities firm involved in soil-disturbing activities within the archaeological C-APE for each well facility site. Prior to any soil-disturbing activities, each contractor shall be responsible for ensuring that the ALERT sheet is circulated to all field personnel, including machine operators, field crew, pile drivers, supervisory personnel, etc. The SFPUC shall provide the ERO with a signed affidavit from the responsible parties (prime contractor, subcontractor[s], and utilities firm) confirming that all field personnel have received copies of the ALERT sheet.</p> <p>If potential archaeological resources are uncovered, the discovery site shall be secured, personnel and equipment shall be redirected, and the ERO shall be notified immediately. If the ERO determines that an archaeological resource may be present within the C-APE, the SFPUC shall retain the services of a qualified archaeological consultant. For construction at Site 11, an archaeological monitoring plan shall be prepared and implemented. The monitoring plan shall specify the location and duration of monitoring activities and shall be subject to review by the ERO.</p> <p>If archaeological resources are discovered at Site 11 or any of the other well facility sites, the archaeological consultant shall advise the ERO as to whether the discovery is an archaeological resource that retains sufficient integrity and is of potential scientific/historical/cultural significance. If an archaeological resource is present, the consultant shall identify and evaluate the archaeological resource. The archaeological 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 SFPUC.</p>	<ol style="list-style-type: none"> 1. SFPUC EMB 2. SFPUC EMB (Archeologist) 3. SFPUC CMB 4. SFPUC CMB (Archeologist) 5. SFPUC CMB/BEM (Archeologist) 	<ol style="list-style-type: none"> 1. SFPUC BEM 2. SFPUC BEM/ERO 3. SFPUC BEM 4. SFPUC BEM/ERO 5. SFPUC BEM/ERO 	<ol style="list-style-type: none"> 1. Ensure that the contract documents include requirements for a qualified archeologist and measures related to archeological monitoring during construction for Site 11. 2. Development of an Archaeological Monitoring Plan for Site 11. 3. Ensure that all project personnel for each well facility site receive “Alert” sheet. Maintain file of affidavits for submittal to ERO. Monitor to ensure that the contractor implements measures in the contract documents, report noncompliance, and ensure corrective action. 4. Ensure that all potential discoveries are reported to the ERO as required and that the contractor suspends work in the vicinity. Mobilize an archeologist (whose credentials have been verified) to the area if the ERO determines that an archeological resource may be present. 5. In the event of a potential discovery, archeologist shall evaluate the potential discovery and advise ERO as to the significance of the discovery. Proceed with recommendations, evaluations, and implementation of additional measures in consultation with ERO. Prepare and distribute Final ADRR as required. 	<ol style="list-style-type: none"> 1. Design 2. Design 3. Pre-construction and Construction 4. Construction 5. Construction
CR-2 (cont.)		<p>Measures might include: preservation in situ of the archaeological resource; an archaeological monitoring program; or an archaeological evaluation program. If an archaeological monitoring program or archaeological testing program is required, it shall be subject to review by the ERO. The ERO may also require that the SFPUC immediately implement a site security program if the archaeological resource is at risk from vandalism, looting, or other damaging actions.</p> <p>For any discovery of an archaeological resource, the archaeological consultant shall submit an archaeological data recovery report (ADRR) to the ERO which, in addition to the usual contents of the ADRR, shall: include an evaluation of the historical significance of any discovered archaeological resource; describe the archaeological and historical research methods employed in the archaeological monitoring/data recovery program(s) undertaken; and present, analyze and interpret the recovered data. Information that may put at risk any archaeological resource shall be provided in a separate removable insert within the final report. Once approved by the ERO, copies of the ADRR shall be distributed as follows: the relevant California Historical Resources Information System Information Center shall receive one copy, and the ERO shall receive one copy of the transmittal letter of the ADRR to the Information Center. The San Francisco Planning Department, Environmental Planning Division, shall receive three copies of the ADRR along with copies of any formal site recordation forms (California Department of Parks and</p>				

EXHIBIT 1 (continued)

REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		Recreation Form 523 series) and/or documentation for nomination to the National Register/California Register. The SFPUC shall receive copies of the ADRR in the number requested. In instances of high public interest in or high interpretive value of a resource, the ERO may require a different final report content, format and distribution than that presented above. All archaeological work performed under this mitigation measure shall be subject to review by the ERO or designee.				
CR-3	Project construction could result in a substantial adverse effect by destroying a unique paleontological resource or site.	<p>M-CR-3: Suspend Construction Work if a Paleontological Resource is Identified (All Sites except Site 9 and Westlake Pump Station)</p> <p>If a paleontological resource (fossilized invertebrate, vertebrate, plant or micro-fossil) is discovered during construction at any of the proposed well facility sites, all ground disturbing activities within 50 feet of the find shall be temporarily halted but may be diverted to areas beyond 50 feet from the discovery to continue working. An appointed representative of the SFPUC shall notify a qualified paleontologist, who will document the discovery as needed, evaluate the potential resource, and assess the nature and significance 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 material, if the SFPUC determines that the find cannot be avoided. The paleontologist shall make recommendations for any necessary treatment that is consistent with the SVP Guidelines (SVP 2012) and currently accepted scientific practices. If required, treatment for fossil remains may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection and may also include preparation and publication of a report describing the find. The paleontologist's recommendations shall be subject to review and approval by the ERO or designee. 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.</p>	<ol style="list-style-type: none"> 1. SFPUC EMB 2. SFPUC CMB/BEM (paleontologist) 3. SFPUC CMB/BEM (paleontologist) 	<ol style="list-style-type: none"> 1. SFPUC BEM 2. SFPUC BEM/ERO 3. SFPUC BEM/ERO 	<ol style="list-style-type: none"> 1. Ensure that the contract documents include the listed measures related to discovery of paleontological resources. 2. Ensure that all potential discoveries are reported to the ERO as required and that the contractor suspends work in the vicinity as required. Mobilize a qualified paleontologist (whose credentials have been verified) to the area if the ERO determines that a paleontological resource may be present. 3. In the event of a potential discovery, evaluate the potential discovery and advise ERO as to the significance of the discovery. Proceed with recommendations, evaluations, and implementation of additional measures in consultation with ERO. 	<ol style="list-style-type: none"> 1. Design 2. Construction 3. Construction
CR-4	Project construction could result in a substantial adverse effect related to the disturbance of human remains.	<p>M-CR-4: Accidental Discovery of Human Remains (All Sites except Westlake Pump Station)</p> <p>The treatment of any human remains and associated or unassociated funerary objects discovered during soil-disturbing activities shall comply with applicable State laws. Such treatment would include immediate notification of the San Mateo County Coroner and, in the event of the coroner's determination that the human remains are Native American, notification of the NAHC, which would appoint a Most Likely Descendant (MLD) (PRC Section 5097.98). A qualified archaeologist, the SFPUC and MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of any human remains and associated or unassociated funerary objects (CEQA Guidelines Section 15064.5[d]). The agreement would take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, and final disposition of the human remains and associated or unassociated funerary objects. The PRC allows 48 hours to reach agreement on these matters. If the MLD and the other parties could 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." All archaeological work performed under this mitigation measure shall be subject to review by the ERO or designee.</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/ERO 3. SFPUC BEM 	<ol style="list-style-type: none"> 1. Ensure that Contract Documents include measures related to discovery of human remains. 2. If potential human remains are encountered, mobilize an archeologist (whose credentials have been verified) 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 to the San Mateo County Coroner as required and that contractor suspends work in the vicinity. Report noncompliance and ensure corrective action. 	<ol style="list-style-type: none"> 1. Design 2. Construction 3. Construction
CR-5	Project facilities could cause an adverse change in the significance of a historical resource.	<p>M-CR-5a: Minimize Facilities Siting Impacts on Elements of the Historical Resource at Site 14</p> <p>The SFPUC shall implement the following measures to minimize impacts on Site 14:</p>	<ol style="list-style-type: none"> 1. SFPUC EMB 2. SFPUC EMB 3. SFPUC EMB/BEM 	<ol style="list-style-type: none"> 1. SFPUC BEM 2. SFPUC BEM/VA officials/Historical 	<ol style="list-style-type: none"> 1. Ensure that Construction Documents include required design elements for Site 14 including landscaping and fencing. 	<ol style="list-style-type: none"> 1. Design 2. Pre-Construction 3. Pre-Construction

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<ul style="list-style-type: none"> The proposed well facility structure shall be located as close to the northern fence as feasible taking into consideration the need of the VA for vehicle access along this fence line. The SFPUC shall confirm with the VA the minimum width of the required access. The SFPUC shall construct a well facility building or a fenced enclosure to house the well and well appurtenances as discussed below: If the SFPUC constructs a building to house the well and well appurtenances, the proposed facility building shall be constructed at a height of no more than eight feet. Landscaping shall be planted around the new building to act as a screen, lessening the visual intrusion. Cladding materials for the proposed facility building shall be compatible with those existing on the site and the adjacent maintenance structures (i.e., stucco walls and clay tile hipped roofs). The design of the well facility, including the proposed screening plantings, shall meet any applicable VA planting guidance, and prior to construction shall be reviewed and approved by appropriate VA officials and a historical architect meeting the Secretary of the Interior's Professional Qualification Standards. The proposed building and associated outside areas shall be constructed in compliance with the Secretary of the Interior's Standards for Rehabilitation and be compatible with the existing maintenance buildings in the use of materials with minimal detailing. If the SFPUC constructs a wall around the well and well appurtenances, the wall shall be constructed at a height of no more than eight feet. Landscaping shall be planted around the new fence to act as a screen, lessening the visual intrusion. The design of the well facility, including the proposed screening plantings, shall be reviewed and approved by appropriate VA officials and a historical architect meeting the Secretary of the Interior's Professional Qualification Standards and any applicable VA planting guidance, prior to construction. The proposed fence and associated planted areas shall be constructed in compliance with the <i>Secretary of the Interior's Standards for Rehabilitation</i> and be compatible with the existing maintenance buildings in the use of materials with minimal detailing. The SFPUC shall lay plywood or other material down temporarily for access between the cemetery access road and construction area during construction, unless the type and use of grass pavers proposed are determined by SHPO to be compatible with the historical resource. The existing pump structure and ancillary equipment shall be documented prior to its demolition. The documentation shall follow the Historic American Buildings Survey guidelines. Although a contributing resource, this resource is a utilitarian structure whose contribution to the GGNC as a whole is minor. Therefore, the level of documentation of this resource (Level 1, Level II, Level III, or Level IV) shall be determined by VA officials and an architectural historian meeting the Secretary of the Interior's Professional Qualification Standards. 	(architectural historian)	Architect 3. SFPUC BEM	<ol style="list-style-type: none"> Review and approve final design of Site 14 with VA and a historical architect (whose credentials have been verified). Document the existing pump structure and equipment prior to its demolition. The documentation shall follow the Historic American Buildings Survey guidelines. The level of documentation of this resource (Level 1, Level II, Level III, or Level IV) shall be determined by VA officials and an architectural historian meeting the Secretary of the Interior's Professional Qualification Standards. Verify credentials of architectural historian. 	
CR-5 (cont.)	Project facilities could cause an adverse change in the significance of a historical resource	<p>M-CR-5b: Minimize Facilities Siting Impacts on Elements of the Historical Resource at Site 15</p> <p>The SFPUC shall implement the following measures to minimize impacts on elements of the historical resource at Site 15:</p> <ul style="list-style-type: none"> The proposed facility building and associated outside areas shall be constructed in compliance with the Secretary of the Interior's Standards for Rehabilitation and be compatible with the existing maintenance buildings in the use of materials with minimal detailing. The size and scale of the proposed facility building shall be smaller than that of the existing structure, so as not to overwhelm the existing maintenance building. <ul style="list-style-type: none"> The height shall be below the eave of the adjacent maintenance building. The height of the new 8-foot high concrete wall with stucco finish, perpendicular to the existing building wall, shall be kept below the adjacent maintenance building's window sills. The length shall be kept to the minimum and the building located farther to the east; the east elevation would align with the east elevation of the maintenance building. 	<ol style="list-style-type: none"> SFPUC EMB SFPUC EMB 	<ol style="list-style-type: none"> SFPUC BEM SFPUC BEM/VA officials/Historical Architect 	<ol style="list-style-type: none"> Ensure that Construction Documents include required design elements for Site 15 including landscaping and fencing. Review and approve final design of Site 15 with VA and a historical architect (whose credentials have been verified). 	<ol style="list-style-type: none"> Design Pre-Construction

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<ul style="list-style-type: none"> o The western elevation of the new building shall be set back (to the east) from the face of the western elevation of the existing building by at least 10 feet. o The fence line along Sneath Lane shall be maintained and shall not wrap around the new building; it is acceptable for the building to break the fence line. • The proposed facility building shall be separated from the existing building by a minimum of approximately eight feet (the width of the planting area south of the existing maintenance building), to maintain the relationship of the historic maintenance buildings with the entry gates. • Cladding materials for the proposed facility building shall be compatible with those existing on the site and the adjacent maintenance structures (i.e., stucco walls and clay tile hipped roofs). • Paved parking shall be kept to the minimum necessary and shall not be within 10 feet of the entry gate. • Wrought iron, or equivalent, fencing shall replace the existing chain link fencing. • A landscaping plan shall be developed for the east, south and west elevations and shall reflect the landscaping around nearby structures. The row of existing street trees in front of the maintenance yard fence shall extend to the west to where the wrought iron fence begins. The SFPUC shall work with the VA to develop the landscaping plan. • The design of the proposed facility, including landscape plantings, shall be reviewed and approved by appropriate VA officials and a historical architect meeting the Secretary of the Interior’s Professional Qualification Standards to ensure that proposed structure and associated outside areas are constructed in compliance with the Secretary of the Interior’s Standards for Rehabilitation and any applicable VA planting guidance, prior to construction. 				
TRAFFIC						
TR-1	The Project would conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system.	<p>M-TR-1: Traffic Control Plan (Sites 2, 4, 5, 6, 7, 10, 12, 13, 14, 15, 17 [Alternate], 18 [Alternate], and 19 [Alternate])</p> <p>Prior to construction, the SFPUC and its contractor(s) shall prepare and implement traffic control plans for each local jurisdiction in which construction would affect roadways and intersections. The traffic control plan shall be submitted to the applicable local jurisdiction for review as part of the encroachment permit process. Each contractor shall prepare a traffic control plan for the well facility sites under their contract, and where construction at well facility sites could occur within and/or across multiple streets in the same vicinity, the SFPUC and its construction contractors shall coordinate the traffic control plans to mitigate the impact of traffic disruption.</p> <p>The traffic control plan shall include sufficient measures to address the overall Project construction, as well as appropriate site-specific measures, including measures to reduce potential impacts on traffic flows on roadways affected by Project construction activities. The traffic control plan shall comply with local jurisdiction and Caltrans requirements and be tailored to reflect site-specific traffic and safety concerns, as appropriate. The traffic control plan shall include, but not necessarily be limited to, the following measures as applicable to site-specific conditions:</p> <p><u>Traffic Controls</u></p> <ul style="list-style-type: none"> • Circulation and detour plans shall be developed to minimize impacts on local street circulation. Haul routes that minimize truck traffic on local roadways and residential streets shall be utilized to the extent feasible. Flaggers and/or signage shall be used to guide vehicles through and/or around the construction zone. • A public information program to advise motorists, nearby residents, and adjacent commercial establishments of the impending construction activities (e.g., media coverage, direct distribution of flyers to impacted properties, email notices, portable message signs, informational signs at the job sites) shall be developed and implemented. • Truck routes designated by local jurisdictions shall be identified in the traffic control plan and shall be utilized to the 	<ol style="list-style-type: none"> 1. SFPUC EMB 2. SFPUC CMB 3. SFPUC CMB 4. SFPUC CMB 	<ol style="list-style-type: none"> 1. SFPUC BEM 2. SFPUC BEM/ Caltrans/ SamTrans/Colma/ Daly City/ Millbrae/ San Bruno/South San Francisco/San Mateo County, as applicable 3. SFPUC BEM/ SamTrans/ South San Francisco 4. SFPUC CMB 	<ol style="list-style-type: none"> 1. Ensure that the contract documents include the requirement to prepare a Traffic Control Plan including submittals to applicable local jurisdiction. 2. Ensure that contractor submits a Traffic Control Plan to the appropriate agencies or local jurisdiction, as necessary and obtains any required permits and approvals. Verify that the plan complies with the applicable local requirements. Ensure that the contractor coordinates its plans with those of Caltrans and other applicable agencies and cities for affected roadways and intersections. 3. Arrange with SamTrans and City of South San Francisco to relocate SamTrans bus stops on El Camino Real and Huntington Ave. 4. Monitor to ensure that the contractor implements measures in Traffic Control Plan. Report noncompliance and ensure corrective action. 	<ol style="list-style-type: none"> 1. Design 2. Pre-Construction/ Construction 3. Pre-Construction 4. Construction

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>extent feasible to minimize truck traffic on local roadways and residential streets that are not identified locally as designated haul routes.</p> <ul style="list-style-type: none"> • Lane closures shall be limited during peak hours to the extent feasible. In addition, outside of allowed working hours, or when work is not in progress, roads shall be restored to normal operations, with all trenches covered with steel plates. • Roadside safety protocols shall be implemented, such as advance “Road Work Ahead” warning signs, and speed control (including signs informing drivers of State-legislated double fines for speed infractions in a construction zone) shall be provided to achieve required speed reductions for safe traffic flow through the work zone. • Roadway rights-of-way shall be repaired or restored to their general pre-construction condition (or better) upon completion of construction. • The traffic control plan shall also conform to applicable provisions of the State’s <i>Manual of Traffic Controls for Construction and Maintenance Work Areas</i>. 				
TR-1 (cont.)		<p><u>Private and Emergency Access</u></p> <ul style="list-style-type: none"> • Access to driveways and private roads shall be maintained, as feasible, by using steel trench plates. If access must be restricted for brief periods (more than one hour), property owners shall be notified by the SFPUC in advance of such closures. • At locations where the main access to a nearby property is blocked, the SFPUC shall be required to have ready at all times the means necessary to accommodate access by emergency vehicles to such properties, such as plating over excavations, short detours, and/or alternate routes. • Construction shall be coordinated with facility owners or administrators of land uses that may be more significantly affected by traffic impacts, such as police and fire stations, transit stations, hospitals, ambulance providers, and schools. Emergency responders, and other more significantly affected facility owners and/or operators shall be notified by the SFPUC in advance of the timing, location, and duration of construction activities and the locations and durations of any temporary detours and/or lane closures. <p><u>Transit Controls</u></p> <ul style="list-style-type: none"> • Construction shall be coordinated with local transit service providers to arrange the temporary relocation of bus routes or bus stops in work zones, if necessary. • Prior to construction activities, the SFPUC shall work with SamTrans and the City of South San Francisco to temporarily relocate the SamTrans bus stop located along the southbound lane of El Camino Real near West Orange Avenue. The temporary bus stop shall be located in an acceptable location that minimizes impacts to bus users and meets safety requirements. • Prior to construction activities, the SFPUC shall work with SamTrans and the City of South San Francisco to temporarily relocate the SamTrans bus stop located in the pipeline construction zone along the northbound lane of Huntington Avenue. The temporary bus stop shall be located at an acceptable location that minimizes impacts to bus users and meets safety requirements. <p><u>Pedestrian and Bicycle Access</u></p> <ul style="list-style-type: none"> • Pedestrian and bicycle access and circulation shall be maintained during Project construction where safe to do so. If construction activities encroach on a bicycle lane, warning signs shall be posted that indicate bicycles and vehicles are sharing the lane. <p>Detours shall be included for bicycles and pedestrians in all areas potentially affected by Project construction. Notices shall be provided to advise bicyclists and pedestrians of any temporary detours around construction zones.</p>				

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
C-TR-1	Construction and operation of the proposed Project could result in a cumulatively considerable contribution to cumulative impacts related to transportation and circulation.	<p>M-C-TR-1: Coordinate Traffic Control Plan with other SFPUC Construction Projects (Sites 2, 4, 5, 6, 7, 10, 12, 13, 14, 15, 17 [Alternate], 18 [Alternate], and 19 [Alternate])</p> <p>Prior to construction, the SFPUC and its contractors shall coordinate with other SFPUC construction projects in the region and update traffic control plans to avoid overlapping construction schedules or, if not practical, to minimize impacts to congestion, emergency access, and alternative modes of transportation.</p>	<ol style="list-style-type: none"> 1. SFPUC EMB 2. SFPUC CMB (traffic coordinator) 	<ol style="list-style-type: none"> 1. SFPUC BEM 2. SFPUC BEM 	<ol style="list-style-type: none"> 1. Ensure that contract documents include the requirement to coordinate with other SFPUC projects. 2. Assign a qualified construction coordinator responsible for coordinating the GSR project-specific traffic control plan with other SFPUC projects. 	<ol style="list-style-type: none"> 1. Design 2. Pre-construction/ Construction

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
NOISE						
NO-1	Project construction would result in noise levels in excess of local standards.	<p>M-NO-1: Noise Control Plan (1, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 [Alternate], 18 [Alternate], and 19 [Alternate])</p> <p>The SFPUC will limit well facility and pipeline construction as follows:</p> <ul style="list-style-type: none"> For Site 1 in Daly City, the proposed construction hours for well facility and pipeline construction (i.e., exclusive of well drilling and pump testing) fall within the locally allowable construction hours and therefore may occur as proposed; For Sites 3 and 4 in the County of San Mateo, well facility (exclusive of well drilling and pump testing) and pipeline construction will be limited to the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday and 9:00 a.m. to 5:00 p.m. on Saturday, and shall be disallowed on Sundays and holidays; For Sites 9, 10, 11, 12, 13, 18 (Alternate), and 19 (Alternate) in the City of South San Francisco, well facility (exclusive of well drilling and pump testing at Sites 9, 11, 12, 18 [Alternate], and 19 [Alternate]) and pipeline construction will be limited to the hours of 8:00 a.m. to 8:00 p.m. Monday through Friday and 9:00 a.m. to 8:00 p.m. on Saturday and from 10:00 a.m. to 6:00 p.m. on holidays; For Sites 8 and 17 (Alternate), in the Town of Colma, well facility (exclusive of well drilling and pump testing at Site 17 [Alternate]) and pipeline construction will be limited to the hours of 7:00 a.m. to 8:00 p.m. Monday through Friday and 10:00 a.m. to 6:00 p.m. Saturday and from 10:00 a.m. to 6:00 p.m. on holidays; and For Site 16 in Millbrae, well facility (exclusive of well drilling and pump testing) and pipeline construction will be limited to the hours of 7:30 a.m. to 7:00 p.m. Monday through Friday, 8:00 a.m. to 6:00 p.m. on Saturdays and from 9:00 a.m. to 6:00 p.m. on holidays. The proposed construction hours (exclusive of well drilling and pump testing) from Monday to Friday fall within the locally allowable construction hours and therefore may occur as proposed. <p>The SFPUC will retain a qualified noise consultant to prepare a Noise Control Plan and the SFPUC will approve the Noise Control Plan and ensure that it is implemented to reduce construction noise levels at nearby noise-sensitive land uses to meet the performance standards described below. Upon request, the SFPUC will provide a copy of the completed Noise Control Plan to the jurisdictions listed below:</p> <ul style="list-style-type: none"> For Sites 3 and 4, in unincorporated San Mateo County, well drilling and testing will be limited to 57 dBA L_{eq} at the property line of the nearest sensitive receptor; For Sites 8 and 17 (Alternate), in the Town of Colma, any single piece of construction equipment will be limited to 85 dBA L_{eq} at 25 feet during the day; For Sites 9, 10, 11, 12, 13, 18 (Alternate), and 19 (Alternate), exclusive of nighttime well drilling and pump testing -- in South San Francisco, daytime noise levels will be limited to 90 dBA L_{max} from 8:00 a.m. to 8:00 p.m. Monday to Friday and from 9:00 a.m. to 8:00 p.m. on Saturdays, measured at the property plane or at 25 feet from the loudest single piece of equipment; To the extent feasible, well drilling and pump testing at Sites 9, 11, 12, 18 (Alternate), and Sites 19 (Alternate) in South San Francisco that occurs between the hours of 8:00 p.m. and 10:00 p.m., Monday to Saturday, and from 6:00 p.m. and 10:00 p.m. on Sundays, L₅₀ dBA noise levels will be limited to 60 dBA; from 10:00 p.m. to 7:00 a.m., Monday through Sunday, L₅₀ dBA noise levels will be limited to 50 dBA; and from 7:00 a.m. to 8:00 a.m. Monday to Friday, from 7:00 a.m. to 9:00 a.m. on Saturdays and from 7:00 a.m. to 10:00 a.m. on Sundays and holidays, L₅₀ dBA noise levels will be limited to 60 dBA; and For Site 14, in San Bruno, a single piece of construction equipment will be limited to 85 dBA L_{max} at 100 feet from 7:00 a.m. to 10:00 p.m. or to 60 dBA L_{max} at 100 feet from 10:00 p.m. to 7:00 a.m. 	<ol style="list-style-type: none"> SFPUC EMB SFPUC CMB (qualified noise consultant) SFPUC CMB SFPUC CMB SFPUC CMB 	<ol style="list-style-type: none"> SFPUC BEM SFPUC BEM SFPUC BEM SFPUC BEM SFPUC BEM 	<ol style="list-style-type: none"> Incorporate appropriate language into contract documents regarding allowable work days and hours per each local jurisdiction for each site, including requirement for qualified noise consultant (whose credentials have been verified) to prepare a noise control plan. Ensure that the noise control plan is prepared in accordance with the contract documents and includes allowable work days and hours per each local jurisdiction for each site. Submit noise control plan to local jurisdictions on request. Designate project liaison responsible for responding to noise complaints. Ensure that liaison's name and phone number is included on posted notices. Develop a reporting program for tracking complaints received and for documenting their resolution. Monitor to ensure that the contractor(s) implements noise control requirements, provides 24-hour notice to residents near well drilling sites; reports complaints and resolution, reports noncompliance; ensure corrective action within timelines specified in contract. 	<ol style="list-style-type: none"> Design Pre-Construction Pre-Construction and Construction Pre-Construction and Construction Construction

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
NO-1 (cont.)		<p>The contractor will determine the specific methods to meet the performance standards provided above. Specific measures that can be feasibly implemented to comply with these performance standards include, but are not limited to, the following:</p> <ul style="list-style-type: none"> • Best available noise control practices (including mufflers, intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds) shall be used for all equipment and trucks in order to minimize construction noise impacts. • If impact equipment (e.g., jack hammers, pavement breakers, rock drills) is needed during Project construction, hydraulically or electric-powered equipment shall be used wherever feasible to avoid the noise associated with compressed-air exhaust from pneumatically powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed-air exhaust shall be used. External jackets on the tools themselves shall also be used if available and feasible. • To the extent consistent with applicable regulations and safety considerations, operation of vehicles requiring use of back-up beepers shall be avoided near sensitive receptors during nighttime hours and/or, the work sites shall be arranged in a way that avoids the need for any reverse motions of large trucks or the sounding of any reverse motion alarms during nighttime work. If these measures are not feasible, trucks operating during the nighttime hours with reverse motion alarms must be outfitted with SAE J994 Class D alarms (ambient-adjusting, or “smart alarms” that automatically adjust the alarm to 5 dBA above the ambient near the operating equipment). • Stationary noise sources shall be located as far from sensitive noise receptors as feasible. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used. Enclosure openings or venting shall face away from sensitive noise receptors. • A designated project liaison shall be responsible for responding to noise complaints during the construction phases. The name and phone number of the liaison shall be conspicuously posted at construction areas and on all advanced notifications. This person shall take steps to resolve complaints, including periodic noise monitoring, if necessary. Results of noise monitoring shall be presented at regular Project meetings with the contractor. The liaison shall coordinate with the contractor to modify any construction activities that generate noise levels above the levels identified in the performance standards listed in this measure. • A reporting program shall be required that documents complaints received, actions taken to resolve problems, and effectiveness of these actions. • Locate equipment at the work area to maximize the distance to noise-sensitive receptors, and to take advantage of any shielding that may be provided by other on-site equipment. • Operate the equipment mindful of the residential uses nearby, especially during the nighttime hours. • Maintain respectful and orderly conduct among workers, including worker conversation noise during the nighttime hours. • Maintain the equipment properly to minimize extraneous noise due to squeaking or rubbing machinery parts, damaged mufflers, or misfiring engines. • Provide advance notice to nearby residents prior to starting work at each work site, with information regarding anticipated schedule, hours of operation and a Project contact person. • Provide a minimum 24-hour advance notice to residents within 250 feet of the production well site prior to nighttime work involving drilling, drilling-related activities, pumping tests, or truck deliveries. • Schedule work and deliveries to minimize noise-generating activities during nighttime hours at work sites (e.g., no deliveries or non-essential work). • Utilize a temporary noise barrier placed as close to the receptor (e.g., along the residential property line) or to the work site (e.g., as close as 15 to 20 feet from the drill rig or loudest generating activity area) as possible. • Utilize sound blankets. 				

EXHIBIT 1 (continued)

REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
NO-2	Project construction would result in excessive groundborne vibration.	<p>M-NO-2: Reduce Vibration Levels during Construction of Pipelines (Sites 3, 4, 12, 15, and 18 [Alternate])</p> <p>The SFPUC shall require that the construction contractor not use vibratory compaction equipment within 25 feet of structures adjacent to Sites 3, 4, 12, 15, and 18 (Alternate). Non-vibratory compaction or controlled low strength materials (CLSM) backfill may be used in lieu of vibratory compaction equipment at these locations.</p>	<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"> Incorporate appropriate language into contract documents for no vibratory compaction equipment within 25 feet of structures adjacent to Sites 3, 4, 12, 15, and 18. Monitor to ensure that the contractor(s) implements non-vibratory compaction at Sites 3, 4, 12, 15, and 18, report noncompliance, and ensure corrective action within timelines specified in contract. 	<ol style="list-style-type: none"> Design Construction
NO-3	Project construction would result in a substantial temporary increase in ambient noise levels.	<p>M-NO-3: Expanded Noise Control Plan (1, 3, 4, 5, 9, 10, 11, 12, 13, 14, 15, 16, 17 [Alternate], 18 [Alternate], and 19 [Alternate])</p> <p>In addition to the requirements of Mitigation Measure M-NO-1 (Noise Control Plan) under Impact NO-1, the SFPUC will require that its construction contractor prepare and implement an Expanded Noise Control Plan to further reduce construction noise levels at nearby noise-sensitive land uses. The SFPUC will provide a copy of the completed Expanded Noise Control Plan to jurisdictions upon request. Construction noise shall not exceed the following performance standards as measured at the exterior of the closest sensitive receptor: If noise measurements are not permitted at the exterior of the sensitive receptor's location, the SFPUC shall take noise measurements and then estimate the noise level at the sensitive receptor by adjusting for the attenuation across the additional distance. If there is any conflict between Mitigation Measure M-NO-1 (Noise Control Plan) and Mitigation Measure M-NO-3 (Expanded Noise Control Plan), the most stringent requirement would be applicable.</p> <ul style="list-style-type: none"> 70 dBA L_{eq} between the hours of 7:00 a.m. and 10:00 p.m., Monday through Friday at residences, senior care and religious facilities, and schools. 50 dBA L_{eq} at residential type buildings during normal sleeping hours, which are considered to be 10:00 p.m. to 7:00 a.m. <p>The contractor will determine the specific methods to meet the performance standards given above. Specific measures that can be feasibly implemented to comply with these performance standards include, but are not limited to, those listed in Mitigation Measure M-NO-1 (Noise Control Plan) under Impact NO-1.</p> <p>For Sites 1, 3, 4, 9, 12, 14, 16, 18 (Alternate), and 19 (Alternate), the SFPUC shall offer hotel vouchers to residents who are subject to noise levels from well drilling and testing that exceed the performance standard of 50 dBA L_{eq} at the exterior of the residence for the period of the well drilling and pump testing that will occur during the nighttime hours.</p>	<ol style="list-style-type: none"> SFPUC EMB SFPUC CMB(qualified noise consultant) SFPUC CMB/ Communications SFPUC CMB 	<ol style="list-style-type: none"> SFPUC BEM SFPUC BEM SFPUC BEM SFPUC BEM 	<ol style="list-style-type: none"> Incorporate appropriate language into contract documents including requirement for qualified noise consultant to prepare an expanded noise control plan for Sites 1, 3 through 5, and 9 through 19. Ensure that the expanded noise control plan is prepared in accordance with the contract documents and includes noise performance standards of <ol style="list-style-type: none"> 70 dBA L_{eq} between the hours of 7:00 a.m. and 10:00 p.m., Monday through Friday at residences, senior care and religious facilities, and schools and <ol style="list-style-type: none"> 50 dBA L_{eq} at residential type buildings during normal sleeping hours, which are considered to be 10:00 p.m. to 7:00 a.m. For Sites 1, 3, 4, 9, 12, 14, 16, 18, and 19, the SFPUC shall offer hotel vouchers to residents who are subject to noise levels from well drilling and testing that exceed the performance standard of 50 dBA L_{eq} at the exterior of the residence for the period of the well drilling and pump testing that will occur during the nighttime hours Monitor to ensure that the contractor(s) implements noise control requirements, report noncompliance, and ensure corrective action within timelines specified in contract. 	<ol style="list-style-type: none"> Design Preconstruction Preconstruction and Construction Construction

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
NO-5	Operation of the Project would result in exposure of people to noise levels in excess of local noise standards or result in a substantial permanent increase in ambient noise levels in the Project vicinity.	<p>M-NO-5: Operational Noise Control Measures (Sites 1, 5 [On-site Treatment], 7 [On-site Treatment], 9, 12, 18 [Alternate], and the Westlake Pump Station)</p> <p>The SFPUC shall incorporate noise controls that reduce noise levels from operation of the Project to meet the following performance standards:</p> <ul style="list-style-type: none"> For Sites 1, 5 (On-site Treatment), 9, 12, 18 (Alternate), and the Westlake Pump Station, operational noise levels shall be reduced to 50 dBA L_{eq} or less. For Site 7 (On-site Treatment), operational noise levels shall be reduced to 58 dBA L_{eq} or less. <p>To meet these performance standards, noise control measures, which could include the following or other equally effective measures, will be implemented, as needed. The designs for the enclosure buildings will be reviewed by a qualified acoustical expert¹ to confirm that the following measures have been appropriately incorporated into the final design documents and that they are sufficient to achieve the stipulated performance standard for each site:</p> <ul style="list-style-type: none"> Install sound-absorbing material on the interior ceiling and/or wall surfaces, as necessary, to control reverberant buildup within the enclosure building. Utilize standard construction methods to eliminate cracks and gaps at the wall-roof junction and at penetrations through the walls and roof. Install a gypsum board ceiling, or equivalent, to provide a sound insulating roof construction. Orient louvers away from sensitive receptors, where possible. Where it is not possible to orient louvers away from sensitive receivers, utilize sound attenuators or additional baffles that provide up to 20 dBA of transmission loss from inside to outside the building as needed to meet the performance standard. Use doors that are filled steel and fully weather-stripped. Do not allow unprotected ventilation openings through the building walls or roof. Control all ventilation sound transmission paths, as appropriate for the fan types and ventilation systems used. <p>¹ Qualifications shall include the following: A) Bachelor of Science or higher degree from a qualified program in engineering, physics, or architecture offered by an accredited university or college, and five years' experience in noise control engineering and construction noise analysis. B) Demonstrated substantial and responsible experience in preparing and implementing construction and operational noise control treatments and monitoring plans, calculating construction and operational noise levels, and overseeing the implementation of construction and operational noise abatement measures.</p>	<ol style="list-style-type: none"> SFPUC EMB SFPUC CMB 	<ol style="list-style-type: none"> SFPUC Water Enterprise, WRD (qualified acoustical expert) SFPUC BEM 	<ol style="list-style-type: none"> Incorporate design elements for Sites 1, 5, 7, 9, 12, and 18 to meet performance standards. Qualified acoustical expert (whose credentials have been verified) shall review design and confirm measures are appropriately incorporated into the final design documents Monitor to ensure that operational noise performance standards at Sites 1, 5, 7, 9, 12, and 18 are met. 	<ol style="list-style-type: none"> Design Post-Construction (prior to project closeout)
AIR QUALITY						
AQ-2	Emissions generated during construction activities would violate air quality standards and would contribute substantially to an existing air quality violation.	<p>M-AQ-2a: BAAQMD Basic Construction Measures (All Sites)</p> <p>The SFPUC shall post one or more publicly visible signs with the telephone number and person to contact at the SFPUC with complaints related to excessive dust or vehicle idling. This person shall respond to complaints and, if necessary, take corrective action within 48 hours. The telephone number and person to contact at the BAAQMD's Compliance and Enforcement Division shall also be provided on the sign(s) in the event that the complainant also wished to contact the applicable air district.</p>	<ol style="list-style-type: none"> SFPUC EMB SFPUC Communications/CMB SFPUC CMB 	<ol style="list-style-type: none"> SFPUC BEM SFPUC BEM SFPUC BEM 	<ol style="list-style-type: none"> Ensure that the contract documents include specified dust control measures and exhaust control measures, including signage requirements. Designate project liaison responsible for developing and implementing 	<ol style="list-style-type: none"> Design Pre-construction/Construction Construction

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>In addition, to limit dust, criteria pollutants, and precursor emissions associated with Project construction, the following BAAQMD-recommended Basic Construction Measures shall be included in all construction contract specifications for the proposed Project:</p> <ul style="list-style-type: none"> • All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas and unpaved access roads) shall be watered two times per day; • All haul trucks transporting soil, sand, or other loose material off-site shall be covered; • All visible mud or dirt tracked-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping shall be prohibited; • All vehicle speeds on unpaved areas shall be limited to 15 miles per hour; • All paving shall be completed as soon as possible after pipeline replacement work is finished; • Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points; and • All construction equipment shall be maintained and properly tuned in accordance with manufacturer’s specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. 			<p>procedures responding to complaints related to dust or vehicle idling. Monitor to ensure that the contractor implements measures in contract documents. Report noncompliance and ensure corrective action.</p> <p>3. Monitor to ensure that the contractor(s) implements dust control requirements, report noncompliance, and ensure corrective action within timelines specified in contract.</p>	
AQ-2 (cont.)	Emissions generated during construction activities would violate air quality standards and would contribute substantially to an existing air quality violation.	<p>M-AQ-2b: NO_x Reduction during Construction of Alternate Sites</p> <p>If one to three wells at Sites 1 through 16 are drilled but found to be unusable for any reason, and one to three well facilities are therefore constructed at alternate sites, the SFPUC shall reduce NO_x emissions by 20 percent during construction at the alternate site or sites. To meet this performance standard, the SFPUC shall develop and implement a plan demonstrating that the off-road equipment (i.e., equipment rated at more than 50 horsepower that is owned or leased by the contractor or subcontractors) to be used in constructing the wells and facilities at the alternate sites would achieve a fleet-wide average of 20 percent NO_x reduction compared to the most recent CARB fleet average. Acceptable options for reducing emissions include the use of late model engines (i.e., meeting U.S. EPA Tier 3 standards or later), low-emission diesel products, alternative fuels that have lower NO_x emissions, engine retrofit technology, after-treatment products, add-on devices, and/or other options as such become available.</p>	<p>1. SFPUC EMB 2. SFPUC EMB/CMB 3. SFPUC CMB</p>	<p>1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM</p>	<p>1. Ensure that the contract documents include specifications for a 20 percent reduction in NO_x emissions if one to three wells are drilled but unusable and alternate wells would be constructed at Sites 17, 18, and 19.</p> <p>2. If one to three wells are drilled but unusable and alternate wells would be constructed a plan to meet the NO_x emissions performance standard will be developed.</p> <p>3. Monitor to ensure that the contractor(s) implements measures identified in the plan to reduce NO_x emissions at Sites 17, 18, and 19, report noncompliance, and ensure corrective action.</p>	<p>1. Design/ Construction 2. Pre-construction/ Construction 3. Construction</p>
AQ-3	Project construction would expose sensitive receptors to substantial pollutant concentrations.	<p>M-AQ-3: Construction Health Risk Mitigation (Site 5 On-site Treatment)</p> <p>The SFPUC shall require the construction contractor to utilize, during the construction of Site 5 (On-site Treatment), off-road equipment (more than 50 horsepower) with late model engines meeting U.S. EPA Tier 4 (Interim), or utilize a combination of Tier 2 or Tier 3 engines with add-on devices that consist of level 3 diesel particulate filters.</p>	<p>1. SFPUC EMB 2. SFPUC CMB</p>	<p>1. SFPUC BEM 2. SFPUC BEM</p>	<p>1. Ensure that the contract documents include specified requirements for off-road equipment for Site 5.</p> <p>2. Monitor to ensure that the contractor utilizes off-road equipment at Site 5 as required. Report noncompliance and ensure corrective action.</p>	<p>1. Design 2. Construction</p>

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
UTILITIES AND SERVICE SYSTEMS						
UT-1	Project construction could result in potential damage to or temporary disruption of existing utilities during construction.	<p>M-UT-1a: Confirm Utility Line Information (All Sites)</p> <p>Prior to excavation and/or other ground-disturbing construction activities, the SFPUC or its contractor(s) shall locate overhead and underground utility lines, such as natural gas, electricity, sewer, telephone and waterlines, that may be encountered during excavation work. Pursuant to State law, the SFPUC or its contractor(s) shall notify USA North. Information regarding the size and location of existing utilities shall be confirmed before excavation and other ground-disturbing activities commence. These utilities shall be highlighted on all construction drawings. Utilities may be located by customary techniques such as geophysical methods and hand excavation.</p>	1. SFPUC EMB	1. SFPUC BEM	1. Coordinate final construction plans and specifications during the design phase and ensure utility lines are identified on all construction drawings. Ensure that the contract documents include the requirement that contractor coordinate and notify utility service providers.	1. Design
UT-1 (cont.)		<p>M-UT-1b: Safeguard Employees from Potential Accidents Related to Underground Utilities (All Sites) While any excavation is open, the SFPUC or its contractor(s) shall protect, support, or remove underground utilities as necessary to safeguard employees. As part of contractor specifications, the contractor(s) shall be required to provide updates on planned excavations for the upcoming week and to specify when construction will occur near any high-priority utility lines that are identified. At the beginning of each week when this work will take place, the SFPUC construction managers shall conduct meetings with contractor staff, as required by the California Occupational Safety and Health Administration (CalOSHA), to record all protective and avoidance measures regarding such excavations.</p>	1. SFPUC EMB 2. SFPUC CMB 3. SFPUC CMB	1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM	1. Ensure that contract documents include applicable requirements to safeguard employees from potential accidents related to underground utilities. 2. Conduct weekly tailgate meetings with contractor prior to any work near high-priority utility lines, and record all protective and avoidance measures that will be implemented in such excavations. 3. Monitor to ensure that the contractor implements measures in contract documents and the protective and avoidance measures identified at tailgate meetings. Report noncompliance and ensure corrective action.	1. Design 2. Construction 3. Construction
UT-1 (cont.)		<p>M-UT-1c: Notify Local Fire Departments (All Sites)</p> <p>In the event that construction activities result in damage to high-priority utility lines, including leaks or suspected leaks, the SFPUC or its contractor(s) shall immediately notify local fire departments to protect worker and public safety.</p>	1. SFPUC EMB 2. SFPUC CMB	1. SFPUC BEM 2. SFPUC BEM	1. Ensure that contract documents include the requirement that the contractor is to notify local fire departments in the event of damage to high-priority utility lines. 2. Obtain documentation from contractor of their notification to local fire departments if damage to a gas utility results in a leak or suspected leak, or whenever damage to any utility results in a threat to public safety.	1. Design 2. Construction
UT-1 (cont.)		<p>M-UT-1d: Emergency Response Plan (All Sites)</p> <p>Prior to commencing construction activities, the SFPUC shall develop an emergency response plan that outlines procedures to follow in the event of a leak or explosion resulting from a utility rupture. The emergency response plan shall identify the names and phone numbers of PG&E staff who would be available 24 hours per day in the event of damage or rupture of the high-pressure PG&E natural gas pipelines. The plan shall also detail emergency response protocols including notification, inspection and evacuation procedures; any equipment and vendors necessary to respond to an emergency, such as an alarm system; and</p>	1. SFPUC EMB 2. SFPUC CMB 3. SFPUC CMB	1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM	1. Ensure that contract documents include requirement to prepare emergency response plan. 2. Ensure that contractor prepares the emergency response plan and verify compliance with requirements. 3. Monitor to ensure that contractor implements measures in contract	1. Design 2. Pre-construction 3. Construction

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		routine inspection guidelines.			documents and emergency response plan. Report non-compliance, and ensure corrective action.	
UT-1 (cont.)		<p>M-UT-1e: Advance Notification (All Sites)</p> <p>The SFPUC or its contractor(s) shall notify all affected utility service providers in advance of Project excavation and/or other ground-disturbing activities. The SFPUC or its contractor(s) shall make arrangements with these entities regarding the protection, relocation, or temporary disconnection of services prior to the start of excavation and other ground-disturbing activities. The SFPUC or its contractor(s) shall coordinate with the appropriate utility service providers to ensure advance notification to residents, owners and businesses in the Project area of a potential utility service disruption two to four days in advance of construction. The notification shall provide information about the timing and duration of the potential service disruption.</p>	<p>1. SFPUC EMB 2. SFPUC CMB</p>	<p>1. SFPUC BEM 2. SFPUC BEM</p>	<p>1. Coordinate final construction plans and specifications during the design phase including obtaining, as necessary, agreements and/or permits. Ensure that the contract documents include the requirement for contractor(s) to coordinate with utility service providers and to ensure advance notification to residents, owners and businesses in the Project area of a potential utility service disruption two to four days in advance of construction.</p> <p>2. Monitor to ensure that contractor implements measures in the contract documents. Report noncompliance, and ensure corrective action.</p>	<p>1. Design 2. Construction</p>
UT-1 (cont.)		<p>M-UT-1f: Protection of Other Utilities during Construction (All Sites)</p> <p>Detailed specifications shall be prepared as part of the design plans to include procedures for the excavation, support and fill of areas around subsurface utilities, cables and pipes. If it is not feasible to avoid an overhead utility line during construction, the SFPUC or its contractor(s) shall coordinate with the affected utility owner to either temporarily or permanently support the line, to de-energize the line while temporarily supporting the overhead line, or to temporarily re-route the line.</p>	<p>1. SFPUC EMB 2. SFPUC CMB</p>	<p>1. SFPUC BEM 2. SFPUC BEM</p>	<p>1. Coordinate final construction plans and specifications during the design phase including obtaining, as necessary, agreements and/or permits. Ensure that the contract documents include the requirement for contractor(s) to coordinate with utility service providers.</p> <p>2. Monitor to ensure that contractor(s) implements measures in the contract documents. Report noncompliance, and ensure corrective action.</p>	<p>1. Design 2. Construction</p>
UT-1 (cont.)		<p>M-UT-1g: Ensure Prompt Reconnection of Utilities (All Sites)</p> <p>The SFPUC or its contractor(s) shall promptly notify utility providers to reconnect any disconnected utility lines as soon as it is safe to do so.</p>	<p>1. SFPUC EMB 2. SFPUC CMB</p>	<p>1. SFPUC BEM 2. SFPUC BEM</p>	<p>1. Ensure that the contract documents include the requirement for contractor(s) to notify utility service providers.</p> <p>2. Monitor to ensure that contractor implements measures in the contract documents. Report noncompliance, and ensure corrective action.</p>	<p>1. Design 2. Construction</p>
UT-1 (cont.)		<p>M-UT-1h: Avoidance of Utilities Constructed or Modified by Other SFPUC Projects (All Sites)</p> <p>The final construction drawings for the Project shall reflect any changes in utility locations, as well as the locations of any new utilities installed during construction of other SFPUC projects in San Mateo County whose disturbance areas overlap with the Project area.</p>	<p>1. SFPUC EMB</p>	<p>1. SFPUC BEM</p>	<p>1. Coordinate final construction plans and specifications during the design phase including coordinating any changes in utility locations, as well as the locations of any new utilities installed during construction of other SFPUC projects in San Mateo County. Ensure that the contract documents include modifications</p>	<p>1. Design</p>

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
UT-1 (cont.)		<p>M-UT-1i: Coordinate Final Construction Plans with Affected Utilities (All Sites)</p> <p>The SFPUC or its contractor(s) shall coordinate final construction plans and specifications with affected utility providers.</p>	1. SFPUC EMB 2. SFPUC CMB	1. SFPUC BEM 2. SFPUC BEM	1. Provide construction plans and specifications to utilities. Ensure that the contract documents include the requirement for contractor(s) to notify affected utilities in advance of work near their facilities. 2. Monitor to ensure that contractor(s) implements measures in the contract documents. Report noncompliance, and ensure corrective action.	1. Design 2. Construction
UT-4	Project construction could result in a substantial adverse effect related to compliance with federal, State, and local statutes and regulations pertaining to solid waste.	<p>M-UT-4: Waste Management Plan (All Sites)</p> <p>The SFPUC shall require the construction contractor(s) to prepare a Waste Management Plan identifying the types of debris that would be generated by the Project and how all waste streams would be handled within each jurisdiction. In accordance with the priorities of AB 939, the plan shall emphasize source reduction measures followed by recycling and composting methods to reduce the amount of waste being disposed of in landfills. The plan shall include actions to divert waste with disposal in a landfill in accordance with local ordinance requirements as follows:</p> <p><u>Daly City (Sites 1, 2, 5, 6, and the Westlake Pump Station)</u> For sites within Daly City, at least 60 percent of waste tonnage from construction and demolition shall be diverted from disposal through reuse or recycling. The maximum feasible amount of designated recyclable and reusable materials shall be salvaged prior to demolition. Construction and demolition debris is defined as discarded materials generally considered to be not water soluble and nonhazardous in nature, including, but not limited to: steel, copper, aluminum, glass, brick, concrete, asphalt material, pipe, gypsum, wallboard, and lumber; rocks, soils, tree remains, trees, and other vegetative matter that normally results from land clearing, landscaping, and development operations for a construction project; and remnants of new materials, including, but not limited to: cardboard, paper, plastic, wood, and metal scraps.</p> <p><u>Unincorporated San Mateo County (Sites 3, 4)</u> For sites within unincorporated San Mateo County, salvage all or parts of a structure where practicable; recycle or reuse 100 percent of inert solids at approved facilities; direct source separating non-inert materials (e.g., cardboard and paper, wood, metals, green waste, new gypsum wallboard, tile, porcelain fixtures, and other easily recycled materials) to recycling facilities approved by the County, the remainder (but no more than 50 percent by weight or yardage) of which shall be taken to a facility for disposal.</p>	1. SFPUC EMB 2. SFPUC CMB 3. SFPUC CMB	1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM	1. Ensure that contract documents include applicable measures including requirement to prepare a Waste Management Plan and submittal of required waste management documentation. 2. Ensure that contractor prepares a Waste Management Plan and verify applicable compliance with requirements for each site. 3. Monitor to ensure that contractor implements measures in a Waste Management Plan, including submittal of required waste management documentation. Report non-compliance, and ensure corrective action.	1. Design 2. Pre-construction 3. Construction
UT-4 (cont.)		<p><u>Colma (Sites 7, 8, and Site 17 [Alternate])</u> For sites within Colma, recycle 50 percent of the waste tonnage from any demolition project where the waste includes concrete and asphalt (or 15 percent where there is no concrete and/or asphalt); and recycle 50 percent of waste tonnage for new construction.</p> <p><u>South San Francisco (Sites 9, 10, 11, 12, 13, 18 [Alternate], and 19 [Alternate])</u> For sites within South San Francisco, recycle 100 percent of inert solids (i.e., asphalt, concrete, rock, stone, brick, sand, soil and fines), and recycle at least 50 percent of the remaining construction and demolition debris.</p> <p><u>San Bruno (Sites 14 and 15)</u> For sites within San Bruno, recover the maximum feasible amount of salvageable designated recyclable and reusable materials prior to demolition; divert 50 percent of construction and demolition debris from residential and commercial buildings.</p>				

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p><u>Millbrae (Site 16)</u> For sites within Millbrae, recycle 50 percent of all waste generated for the Project by weight, with at least 25 percent achieved through reuse and recycling of materials other than source separated dirt, concrete, and asphalt.</p> <p>The plan shall be reviewed by the SFPUC, and upon Project completion, the contractor shall submit receipts to the SFPUC documenting achievement of the stated waste reuse, recycling, and disposal goals.</p>				
BIOLOGICAL RESOURCES						
BR-1	Project construction would adversely affect candidate, sensitive, or special-status species.	<p>M-BR-1a: Protection Measures during Construction for Special-status Birds and Migratory Passerines and Raptors (All Sites)</p> <p>The SFPUC shall conduct tree and shrub removal at the facility sites during non-breeding season (generally August 31 through February 28) for special status, migratory birds and raptors, to the extent feasible.</p> <p>If construction activities must occur during the breeding season for special-status birds (March 1 to August 30), the SFPUC shall retain a qualified wildlife biologist who is experienced in identifying birds and their habitat to conduct a pre-construction survey for nesting special-status birds and migratory passerines and raptors. The preconstruction surveys must be conducted within two weeks prior to the initiation of tree removals or pruning, grading, grubbing, structure demolition, or other construction activities scheduled during the breeding season (March 1 to August 30). If the biologist detects no active nesting or breeding activity by special-status or migratory birds or raptors, then work may proceed without restrictions. To the extent allowed by access, all active passerine nests identified within 100 feet and all active raptor nests identified within 250 feet of the limits of work shall be mapped.</p> <p>If migratory bird and/or active raptor nests are identified within 250 feet of a facility site or if an active passerine nest is identified within 100 feet of a facility site, a qualified biologist shall determine whether or not construction activities might impact the active nest or disrupt reproductive behavior. If it is determined that construction would not affect an active nest or disrupt breeding behavior, construction may proceed without any restriction.</p> <p>If the qualified biologist determines that construction activities would likely disrupt raptor breeding or passerine nesting activities, then the SFPUC shall establish a no-disturbance buffer around the nesting location to avoid disturbance or destruction of the nest site until after the breeding season or after a wildlife biologist determines that the young have fledged (usually late June through mid-July). The extent of these buffers would be determined by a wildlife biologist in consultation with CDFW and would depend on the species' sensitivity to disturbance (which can vary among species); the level of noise or construction disturbance; line of sight between the nest and the disturbance; ambient levels of noise and other disturbances; and consideration of other topographical or artificial barriers. The wildlife biologist shall analyze and use these factors to assist the CDFW in making an appropriate decision on buffer distances.</p>	<ol style="list-style-type: none"> 1. SFPUC EMB 2. SFPUC CMB (qualified biologist) 3. SFPUC CMB 	<ol style="list-style-type: none"> 1. SFPUC BEM 2. SFPUC BEM/CDFW 3. SFPUC BEM 	<ol style="list-style-type: none"> 1. Ensure that contract documents specify measures for protection of special status birds, migratory passerines and raptors. 2. If tree removal is not completed during the nonbreeding season, then obtain and review resume or other documentation to verify consulting biologist's qualifications, consult with CDFW if necessary. Conduct surveys, mapping, and agency coordination. Place and maintain buffers, as needed. Document activities in monitoring logs. 3. Monitor to ensure that the contractor implements measures in contract documents. Report noncompliance and ensure corrective action. 	<ol style="list-style-type: none"> 1. Design 2. Pre-construction/ Construction 3. Construction
BR-1 (cont.)	Project construction would adversely affect candidate, sensitive, or special-status species.	<p>M-BR-1b: Protection Measures for Special-status Bats during Tree Removal or Trimming (Sites 1, 3, 4, 7, 10, 11, 12, 15, and 16)</p> <p>The SFPUC will ensure that, prior to the removal of large trees scheduled during seasonal periods of bat activity (February 15 through April 15 and August 15 through October 30), a qualified bat biologist conducts a bat habitat assessment to determine the presence of suitable bat roosting habitat. No more than 30 days before removal of any large tree or snag, a biologist familiar with identification of bats and signs of bats will conduct a pre-construction survey for signs of bat activity. If tree removal or</p>	<ol style="list-style-type: none"> 1. SFPUC EMB 2. SFPUC CMB (qualified biologist) 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 specify measures for protection of special-status bats. 2. Conduct surveys prior to large tree removal at Sites 1, 3, 4, 7, 10, 11, 12, 15, and 16. Exclude bats from suitable habitat, as described. Document 	<ol style="list-style-type: none"> 1. Design 2. Construction; no more than 30 days prior to the removal of any large

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>trimming is postponed or interrupted for more than 30 days from the date of the initial bat survey, the biologist will repeat the pre-construction survey.</p> <p>If a tree provides potentially suitable roosting habitat, but bats are not present, the SFPUC shall exclude bats by temporarily sealing cavities, pruning limbs, or removing the entire tree, in consultation with the qualified bat biologist. Trees and snags with cavities or loose bark that exhibit evidence of use by bats shall be scheduled for bat exclusion and/or eviction, conducted during appropriate seasons (i.e., February 15 through April 15 and August 15 through October 30) and supervised by the biologist.</p> <p>If the biologist determines or presumes bats are present, the biologist shall exclude the bats from suitable tree cavities by installing one-way exclusion devices. After the bats vacate the cavities, the biologist shall plug the cavities or remove the limbs. The construction contractor shall only remove trees after the biologist verifies that the exclusion methods have successfully prevented bats from returning, usually in seven to 10 days. To avoid impacts on non-volant (i.e., non-flying) bats, the biologist shall only conduct bat exclusion and eviction from February 15 through April 15 and from August 15 through October 30. After construction activities are complete, the biologist will remove the exclusion devices.</p>			<p>activities in monitoring logs.</p> <p>3. Monitor to ensure that the contractor implements measures required as a result of bat surveys. Report noncompliance and ensure corrective action.</p>	<p>tree or snag.</p> <p>3. Construction</p>
BR-1 (cont.)		<p>M-BR-1c: Protection Measures during Structure Demolition for Special-status Bats (Site 1)</p> <p>Not more than two weeks prior to building demolition at Site 1, a qualified biologist (i.e., one familiar with the identification of bats and signs of bats) shall survey the building for the presence of roosting bats or evidence of bats. If no roosting bats or evidence of bats are found in the structure, demolition may proceed. If the biologist determines or presumes bats are present, the biologist shall exclude the bats from suitable spaces by installing one-way exclusion devices. After the bats vacate the space, the biologist shall close off the space to prevent recolonization. The construction contractor shall only demolish the building after the biologist verifies that the exclusion methods have successfully prevented bats from returning, usually in seven to 10 days. To avoid impacts on non-volant (i.e., non-flying) bats, the biologist shall only conduct bat exclusion and eviction from February 15 through April 15 and from August 15 through October 30.</p>	<p>1. SFPUC EMB</p> <p>2. SFPUC CMB (qualified biologist)</p> <p>3. SFPUC CMB</p>	<p>1. SFPUC BEM</p> <p>2. SFPUC BEM</p> <p>3. SFPUC BEM</p>	<p>1. Ensure that contract documents specify measures for protection of special-status bats at Site 1.</p> <p>2. Conduct surveys for bats prior to demolition at Site 1. Exclude bats from suitable habitat, as described. Document activities in monitoring logs.</p> <p>3. Monitor to ensure that the contractor implements measures required as a result of bat surveys. Report noncompliance and ensure corrective action.</p>	<p>1. Design</p> <p>2. Construction</p> <p>3. Construction</p>
BR-1 (cont.)	Project construction would adversely affect candidate, sensitive, or special-status species.	<p>M-BR-1d: Monarch Butterfly Protection Measures (Sites 1, 3, 7, 10, and 12)</p> <p>The SFPUC will ensure that, two weeks prior to removing or pruning large eucalyptus, Monterey pine or Monterey cypress trees that occur in a dense stand, a qualified biologist conduct surveys for monarch butterflies if the trees are to be removed or limbed between October 15 and March 1. If no congregations of monarch butterflies are present within the contiguous stand of dense trees, work may proceed without restriction.</p> <p>A pre-construction inspection is not needed for construction activities occurring between March 2 and October 14.</p> <p>If overwintering congregations of monarch butterflies are identified within the tree stand, work may not proceed until the butterflies have left the roosting site. No limbing or tree cutting shall occur in a contiguous stand of trees occupied by monarch butterflies. A qualified biologist shall determine when the butterflies have left and when work in the area may proceed.</p>	<p>1. SFPUC EMB</p> <p>2. SFPUC CMB (qualified biologist)</p> <p>3. SFPUC CMB</p>	<p>1. SFPUC BEM</p> <p>2. SFPUC BEM</p> <p>3. SFPUC BEM</p>	<p>1. Ensure that contract documents specify measures for protection of monarch butterflies at Sites 1, 3, 7, 10, and 12.</p> <p>2. Conduct surveys for monarch butterflies as required. Document activities in monitoring logs.</p> <p>3. Monitor to ensure that the contractor implements measures required as a result of monarch butterflies surveys. Report noncompliance and ensure corrective action.</p>	<p>1. Design</p> <p>2. Construction</p> <p>3. Construction</p>
BR-2	Project construction could adversely affect riparian habitat or other sensitive natural communities.	<p>M-BR-2: Avoid Disturbance to Riparian Habitat (Site 1)</p> <p>The SFPUC shall require its construction contractor to avoid the riparian habitat at Site 1. Prior to any ground disturbing activity, a qualified biologist shall map the location of the Central Coast riparian scrub habitat, and the construction contractor shall install temporary fencing to protect the habitat for the duration of construction.</p>	<p>1. SFPUC EMB</p> <p>2. SFPUC CMB (qualified biologist)</p>	<p>1. SFPUC BEM</p> <p>2. SFPUC BEM</p> <p>3. SFPUC BEM</p>	<p>1. Ensure that contract documents specify measures to avoid disturbance to riparian habitat at Site 1.</p> <p>2. A biologist (whose credentials have been verified) shall conduct mapping prior to</p>	<p>1. Design</p> <p>2. Construction</p> <p>3. Construction</p>

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
			3. SFPUC CMB		ground disturbing activities at Site 1. Document activities in monitoring logs. 3. Monitor to ensure that the contractor implements measures as required. Report noncompliance and ensure corrective action.	
BR-4	Project construction would conflict with local tree preservation ordinances.	<p>M-BR-4a: Identify Protected Trees (Sites 3, 4, 7, 10, 11, 12, 13, 14, 15, and 17 [Alternate])</p> <p>The SFPUC shall identify trees to be protected during construction activities. These trees shall be marked on construction plans and protected during construction activities according to requirements presented in Mitigation Measure M-AE-1b (see Section 5.3, Aesthetics for a description of the tree protection measures). For each protected tree that is removed as part of construction activities, replacement trees shall be planted according to local requirements, as stated in Mitigation Measure M-BR-4b (Protected Tree Replacement).</p>	1. SFPUC EMB 2. SFPUC CMB	1. SFPUC BEM 2. SFPUC BEM	1. Ensure that contract documents specify measures to identify trees to be protected at Sites 3, 4, 7, 10 through 15, and 17, in accordance with applicable local requirements. 2. Monitor to ensure that the contractor implements measures as required. Report noncompliance and ensure corrective action.	1. Design 2. Construction
BR-4 (cont.)	Project construction would conflict with local tree preservation ordinances.	<p>M-BR-4b: Protected Tree Replacement (Sites 4, 7, 9, 12, 15, and 18 [Alternate])</p> <p>The SFPUC shall replace protected trees in accordance with the requirements specified in this mitigation measure and at the ratios specified in this measure for the jurisdiction where the trees to be removed are located. Protected non-native trees removed shall be replaced with native tree species determined suitable for the site by a qualified arborist, horticulturist, landscape architect, or biologist.</p> <p><i>Tree Replacement Requirements Common to All Jurisdictions</i></p> <ul style="list-style-type: none"> Trees shall be replaced within the first year after completion of construction, or as soon as possible in areas where construction has been completed, during a favorable time period for replanting, as determined by a qualified arborist, horticulturist, or landscape architect. Selection of replacement sites and installation of replacement plantings shall be supervised by a qualified arborist, horticulturist, landscape architect, or landscape contractor. Irrigation of trees during the initial establishment period (generally for two to four growing seasons) shall be provided as deemed necessary by a qualified arborist, horticulturist, landscape architect, or landscape contractor. Trees shall be planted at or in close proximity to removal sites, in locations suitable for the replacement species. The specialist shall work with the SFPUC to determine appropriate nearby off-site locations that are within the same jurisdiction from which the trees are removed if replanting within the well facility sites is precluded. A qualified arborist, horticulturist, landscape architect, or landscape contractor shall monitor newly planted trees at least twice a year for five years. Each year, any trees that do not survive shall be replaced and monitored at least twice a year for five years thereafter. 	1. SFPUC EMB 2. SFPUC CMB (arborist, horticulturist, or landscape architect) 3. SFPUC CMB 4. SFPUC Water Enterprise, WST	1. SFPUC BEM 2. SFPUC BEM/Local jurisdiction if off-site 3. SFPUC BEM 4. SFPUC Water Enterprise, WRD	1. Ensure that contract documents specify measures to replace protected trees at Sites 4, 7, 9, 12, 15, and 18. 2. An arborist, horticulturist, or landscape architect (whose credentials have been verified) shall determine the selection of species, location, and timing of plantings. Obtain any necessary permits and approvals for off-site plantings. Document in monitoring logs. 3. Monitor to ensure that the contractor implements measures as required. Report noncompliance and ensure corrective action. 4. Perform bi-annual tree replacement monitoring for at least 5 years.	1. Design 2. Pre-Construction/Construction 3. Construction 4. Post-Construction

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
BR-4 (cont.)		<p><i>San Mateo County Tree Ordinance Replacement Requirements</i></p> <ul style="list-style-type: none"> For each significant/heritage tree removed during construction or lost due to construction-related impacts, a replacement tree shall be planted. Native trees shall be replaced with the same species, and nonnative trees shall be replaced with a native tree species determined suitable for the site by a qualified arborist, horticulturalist, or landscape architect. Each protected tree removed shall be replaced at a 1:1 ratio of a native variety that has the potential to reach a size similar to that of the removed trees. <p><i>Town of Colma Tree Replacement Requirements</i></p> <ul style="list-style-type: none"> Each protected tree removed shall be replaced at a 1:1 ratio. Native trees shall be replaced with the same species, and nonnative trees shall be replaced with a native tree species determined suitable for the site by a qualified arborist, horticulturalist, or landscape architect. <p><i>City of South San Francisco Tree Replacement Requirements</i></p> <ul style="list-style-type: none"> Each protected tree removed shall be replaced with three 24-inch-box sized or two 36-inch-box sized landscape trees. <p><i>City of San Bruno Tree Replacement Requirements</i></p> <ul style="list-style-type: none"> Tree replacement shall be a minimum of either two 24-inch box size trees, or one 36-inch box size tree, for each heritage tree removed. 				
BR-7	Operation of the Project could adversely affect sensitive habitat types associated with Lake Merced.	<p>M-BR-7: Lake Level Management for Water Level Increases for Lake Merced</p> <p>In addition to ongoing monitoring and evaluation of lake levels, as well as maintenance of the Lake-level Model so as to be able to evaluate what lake levels may have been without implementation of the Project based on the actual hydrology that occurs during Project implementation, as described in Mitigation Measure M-HY-9a (Lake Level Monitoring and Modeling for Lake Merced), the SFPUC shall implement corrective action if lake levels increase to 9 feet City Datum as an annual average due to the Project. Corrective action shall be taken to reduce the lake levels to 9 feet City Datum or less. These actions may include one of more of the following, which would result in lowering groundwater levels and thereby indirectly lowering lake levels:</p> <ul style="list-style-type: none"> Temporarily suspend in-lieu delivery of surface water supplies to Daly City so that Daly City would increase pumping from Daly City wells. Increase pumping from GSR wells at Sites 1 through 4, which are within 1.5 miles of Lake Merced. 	1. SFPUC Water Enterprise, WST/Daly City/ Operating Committee	1. SFPUC Water Enterprise, WRD	1. Conduct monitoring and evaluation of lake levels. Maintain the Lake-level model. Implement operation actions to reduce lake levels if lake levels increase to 9 feet City Datum as an annual average due to the Project.	1. Operation
BR-8	Operation of the Project could adversely affect wetland habitats and other waters of the United States associated with Lake Merced.	<p>M-BR-8: Lake Level Management for No-Net-Loss of Wetlands for Lake Merced</p> <p>In addition to ongoing monitoring, evaluation of lake levels, and maintenance of the Lake-level Model so as to be able to evaluate what lake levels may have been without implementation of the Project based on the actual hydrology that occurs during Project implementation, as described in Mitigation Measure M-HY-9a (Lake Level Monitoring and Modeling for Lake Merced), the SFPUC shall implement corrective action if lake levels exceed the range of lake level changes shown in Table 5.14-16 (Lake Merced Water Surface Elevation Range that Results in a Predicted No-Net-Loss of Wetlands) [MMRP table MMRP-1, attached], due to the Project (i.e., the right-hand column). Note that according to Mitigation Measure M-BR-7 (Lake Level Management for Water Level Increases for Lake Merced), Lake Merced lake levels due to the project would be prohibited from exceeding 9 feet City Datum, so some of the higher lake levels that would be acceptable relative to wetlands impacts as identified in Table 5.14-16 would not be acceptable relative to sensitive habitats. In addition, according to Mitigation Measure M-BR-9b (Lake level Management for Lake Merced), Lake Merced lake levels due to the Project would be prohibited from</p>	1. SFPUC Water Enterprise, WST/Daly City/ Operating Committee	1. SFPUC Water Enterprise, WRD	1. Conduct monitoring and evaluation of lake levels. Maintain the Lake-level model. Implement operation actions to reduce lake levels as identified in Table MMRP-1, attached.	1. Operation

EXHIBIT 1 (continued)

REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>decreasing below 0 feet City Datum, so some of the lower lake levels that would be acceptable relative to wetlands impacts identified in Table 5.14-16 would not be acceptable relative to water quality and associated beneficial uses.</p> <p>Corrective actions may include one or more of the following, which would result in the lowering of groundwater levels and thereby indirectly lowering lake levels:</p> <ul style="list-style-type: none"> • Suspend in-lieu delivery of surface water supplies to Daly City. Daly City would thus increase pumping from Daly City wells, which would lower groundwater levels in the vicinity of Lake Merced. • Increase pumping from GSR wells at Sites 1 through 4, which are within 1.5 miles of Lake Merced. 				
GEOLOGY AND SOILS						
GE-3	The Project would expose people or structures to substantial adverse effects related to the risk of property loss, injury, or death due to fault rupture, seismic groundshaking, or landslides.	<p>M-GE-3: Conduct Site-Specific Geotechnical Investigations and Implement Recommendations (All Sites)</p> <p>The SFPUC shall conduct a site-specific design-level geotechnical study at Site 11 to provide recommendations for protection from property loss, injury, or death from ground shaking or settlement. Similarly, if Site 18 (Alternate) is selected, the SFPUC shall conduct a site-specific design-level geotechnical study for the site.</p> <p>At all sites, the facilities shall be designed and constructed in conformance with the specific recommendations contained in design-level geotechnical studies. The recommendations made in the geotechnical studies shall be incorporated into the final plans and specifications and implemented during construction. The site-specific recommendations in the design-level geotechnical studies relative to ground shaking include the following measures:</p> <ul style="list-style-type: none"> • Site-specific seismic design parameters in accordance with the International Building Code Static Force Procedure; • Specified lateral earth pressures and seismic loading for retaining walls; • Earthwork recommendations for site preparation, excavations, use of engineered fill and utility trench/pipe backfill; and • Foundation recommendations for subgrade preparation, foundations systems, and floor slabs. <p>Site-specific recommendations in the design-level geotechnical studies relative to settlement include the following measures:</p> <ul style="list-style-type: none"> • Supporting structures at these sites on structurally rigid mat foundations with contact pressures in accordance with the bearing capacities identified in the geotechnical reports; • Post-tensioning to reinforce and increase the structural rigidity of grade beams and shallow footings; • Over-excavating artificial fill materials and loose granular soils and recompaction with moisture treated engineered fill to develop a mass of densified soil beneath the proposed well buildings; and • Using flexible pipe connections to accommodate dynamic settlements due to seismic loading. 	<ol style="list-style-type: none"> 1. SFPUC EMB 2. SFPUC CMB 	<ol style="list-style-type: none"> 1. SFPUC BEM 2. SFPUC CMB 	<ol style="list-style-type: none"> 1. If Sites 11 and/or 18 are selected, conduct geotechnical studies and develop design recommendations. For all sites, incorporate design recommendations into construction plans and specifications. 2. Monitor to ensure that the contractor implements design recommendation as required. Report noncompliance and ensure corrective action. 	<ol style="list-style-type: none"> 1. Design 2. Construction
HYDROLOGY AND WATER QUALITY						
HY-1	Project construction activities would degrade water quality as a result of erosion or siltation caused by earthmoving activities or by the accidental release of hazardous construction chemicals during construction.	<p>M-HY-1: Develop and Implement a Storm Water Pollution Prevention Plan (SWPPP) or an Erosion and Sediment Control Plan (All Sites)</p> <p>Consistent with the requirements of the NPDES General Permit for Storm Water Discharges Associated with Construction Activity, at sites where more than one acre of land disturbance would occur (Sites 3, 4, 5, 6, 7, 12, 13, and 14), the SFPUC or its contractor(s) shall develop a Storm Water Pollution Prevention Plan (SWPPP), submit a notice of intent to the SWRCB's Division of Water Quality and implement site-specific BMPs to prevent discharges of nonpoint-source pollutants in construction-related stormwater runoff into downstream water bodies.</p>	<ol style="list-style-type: none"> 1. SFPUC EMB 2. SFPUC CMB 3. SFPUC CMB 	<ol style="list-style-type: none"> 1. SFPUC BEM 2. SFPUC BEM/SWRCB/Local jurisdictions 3. SFPUC BEM/RWQCB/CDFW/other local agencies 	<ol style="list-style-type: none"> 1. Ensure that contract documents require that the contractor design, install, and maintain stormwater controls and prepare a SWPPP or ESCP. 2. Review SWPPP to ensure that it complies with the requirements and submit to notice to SWRCB per the 	<ol style="list-style-type: none"> 1. Design 2. Pre-construction 3. Construction/Post Construction

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>At sites where less than one acre of land disturbance would occur (Sites 1, 2, 8, 9, 10, 11, 15, 16, 17 Alternate, 18 Alternate, 19 Alternate, and the Westlake Pump Station), the SFPUC or its contractor(s) shall prepare and implement Erosion and Sediment Control Plans (ESCPs).</p> <p>Based on the location of the sites, the SFPUC shall provide the SWPPPs and ESCPs to applicable jurisdictions, including the County of San Mateo, San Mateo County Flood Control District, City of Daly City, Town of Colma, City of South San Francisco, City of San Bruno, and City of Millbrae.</p> <p>The SWPPPs and ESCPs shall include sufficient measures to address the overall construction of the Project and, at a minimum, construction contractors should all undertake the following measures, as applicable, to minimize any adverse effects on water quality:</p> <p>Scheduling</p> <ul style="list-style-type: none"> • Schedule construction to minimize ground disturbance during the rainy season. 			<p>Construction General Permit. Review ESCP to ensure that it complies with local jurisdiction requirements. Submit ESCP to local jurisdictions.</p> <p>3. Monitor to ensure the contractor implements the measures in the contract documents, and SWPPP/ESCP including reporting per the Construction General Permit. Ensure contractor performs post-construction BMPs. Report noncompliance to RWQCB, CDFW or other agencies as required and ensure corrective action.</p>	
HY-1 (cont.)		<ul style="list-style-type: none"> • Stabilize all disturbed soils as soon as possible following the completion of soil disturbing work in the Project area. • Stabilize soil with vegetation or physical means in the event rainfall is expected. • Install erosion and sediment control BMPs prior to the start of any ground-disturbing activities. <p>Erosion and Sedimentation</p> <ul style="list-style-type: none"> • Preserve existing vegetation in areas where no construction activity is planned or where construction activity will occur at a later date. • Stabilize and revegetate disturbed areas as soon as possible after construction by planting or seeding and/or using mulch (e.g., straw or hay, erosion control blankets, hydromulch, or other similar material). • Install silt fences or fiber rolls or implement other suitable measures around the perimeters of the construction zone, staging areas, temporary stockpiles, spoil areas, stream channels, and swales, as well as down-slope of all exposed soil areas and in other locations determined necessary to prevent offsite sedimentation. • Install temporary slope breakers during the rainy season on slopes greater than five percent where the base of the slope is less than 50 feet from a water body, wetland, or road crossing at spacing intervals required by the SWRCB Construction General Permit. • Use filter fabric or other appropriate measures to prevent sediment from entering storm drain inlets. • Detain and treat water produced by the dewatering of construction sites using sedimentation basins, sediment traps (when water is flowing and there is sediment), or other measures to ensure that discharges to receiving waters meet applicable water quality objectives. 				
HY-1 (cont.)		<p>Tracking Controls</p> <ul style="list-style-type: none"> • Grade and stabilize construction site entrances and exits to prevent runoff from the site and to prevent erosion. • Remove any soil or sediment tracked off paved roads during construction by employing street sweeping. 				

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>Non-stormwater Control</p> <ul style="list-style-type: none"> • Keep construction vehicles and equipment clean; do not allow excessive buildup of oil and grease. • Check construction vehicles and equipment daily at startup for leaks and repair any leaks immediately. • Do not refuel vehicles and equipment within 50 feet of surface waters to prevent run-on and runoff and to contain spills. • Conduct all refueling and servicing of equipment with absorbent material or drip pans underneath to contain spilled fuel. Collect any fluid drained from machinery during servicing in leak-proof containers and deliver to an appropriate disposal or recycling facility. • Contain fueling areas to prevent run-on and runoff and to contain spills. • Cover all storm drain inlets when paving or applying seals or similar materials to prevent the offsite discharge of these materials. <p>Waste Management and Hazardous Materials Pollution Control</p> <ul style="list-style-type: none"> • Remove trash and construction debris from the Project area regularly. Provide an adequate number of waste containers with lids or covers to keep rain out of the containers and to prevent trash and debris from being blown away during high winds. • Locate portable sanitary facilities a minimum of 50 feet from creeks or waterways. • Ensure the containment of sanitation facilities (e.g., portable toilets) to prevent discharges of pollutants to the stormwater drainage system or receiving water. • Maintain sanitary facilities regularly. • Store all hazardous materials in an area protected from rainfall and stormwater run-on and prevent the offsite discharge of leaks or spills. • Inspect dumpsters and other waste and debris containers regularly for leaks and remove and properly dispose of any hazardous materials and liquid wastes placed in these containers. • Train construction personnel in proper material delivery, handling, storage, cleanup, and disposal procedures. 				
HY-1 (cont.)		<p>BMP Inspection, Maintenance and Repair</p> <ul style="list-style-type: none"> • Inspect all BMPs on a regular basis to confirm proper installation and function. • Inspect all stormwater BMPs daily during storms. • Inspect sediment basins, sediment traps and other detention and treatment facilities regularly throughout the construction period. • Provide sufficient devices and materials (e.g., silt fence, fiber rolls, erosion blankets, etc.) throughout Project construction to enable immediate repair or replacement of failed BMPs. • Inspect all seeded areas regularly for failures and remediate or repair as soon as feasible. 				

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>Permitting, Monitoring, and Reporting</p> <ul style="list-style-type: none"> • Provide the required documentation for inspections, maintenance and repair requirements. • Monitor water quality to assess the effectiveness of control measures. • Maintain written records of inspections, spills, BMP-related maintenance activities, corrective actions and visual observations of any offsite discharge of sediment or other pollutants. • Notify the RWQCB and other agencies as required (e.g., California Department of Fish and Wildlife) if the criteria for turbidity, oil/grease, or foam are exceeded and undertake corrective actions. • Immediately notify the RWQCB and other agencies as required (e.g., California Department of Fish and Wildlife) of any spill of petroleum products or other organic or earthen materials and undertake corrective action. 				
HY-1 (cont.)		<p>Post-construction BMPs</p> <ul style="list-style-type: none"> • Revegetate all temporarily disturbed areas as required after construction activities are completed. • Remove any remaining construction debris and trash from the Project area and staging areas upon Project completion. • Phase the removal of temporary BMPs as necessary to ensure stabilization of the site. <p>At sites covered under the NPDES General Construction Permit, correct post-construction site conditions, as necessary, to comply with the SWPPP and any other pertinent RWQCB requirements.</p>				

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
HY-2	Discharge of groundwater could result in minor localized flooding, violate water quality standards and/or otherwise degrade water quality.	<p>M-HY-2: Management of Well Development and Pump Testing Discharges (All Sites, Except Westlake Pump Station)</p> <p>To address potential impacts on receiving water quality that could result during the construction period related to well development and pump testing, the SFPUC and its contractor shall: 1) prepare and implement a site-specific discharge plan; and 2) fully comply with NPDES requirements.</p> <p>The discharge plan shall specify how the water will be collected, contained, treated, monitored, and discharged to the vicinity storm drainage system or sanitary sewer system. Discharges to storm drains are subject to review and approval by the RWQCB. Based on the location of the sites, the SFPUC shall provide the discharge plans to applicable jurisdictions, including the County of San Mateo, San Mateo County Flood Control District, City of Daly City, Town of Colma, City of South San Francisco, City of San Bruno, and City of Millbrae. The discharge plan shall at a minimum:</p> <ul style="list-style-type: none"> Identify methods and locations for collecting and handling water on site prior to discharge, determine treatment requirements, and determine the capacity of holding tanks. Identify methods for treating water on site prior to discharge, such as filtration, coagulation, sedimentation settlement areas, oil skimmers, pH adjustment, and other BMPs. Establish procedures and methods for maintaining and monitoring discharge operations to ensure that no breach in the process occurs that could result in a failure to achieve/maintain the applicable water quality objectives of receiving waters. Identify discharge locations and include details regarding how the discharge will be conducted to minimize erosion and scour. <p>The proposed discharge is anticipated to be conditionally covered under San Mateo County’s municipal stormwater permit (Order No. 99-059, NPDES Permit No. CAS002992), contingent upon compliance with certain conditions (RWQCB 2009b, 2012). Prior to any discharge to a storm drainage system, the SFPUC and its contractor shall request a determination from the RWQCB as to the type of permit under which the Project effluent discharges will be regulated. Based on that determination, the SFPUC shall prepare and submit all required and relevant Project information so that the RWQCB can issue appropriate guidelines and requirements (e.g., numerical effluent limitations, monitoring and reporting requirements). Based on previous discussions with the RWQCB (RWQCB 2009a, 2012), anticipated conditions include, but would not be limited to:</p>	<ol style="list-style-type: none"> SFPUC EMB SFPUC CMB 	<ol style="list-style-type: none"> SFPUC BEM/applicable local jurisdiction/RWQCB SFPUC BEM 	<ol style="list-style-type: none"> With RWQCB, determine permit type needed and applicable requirements. Ensure that contract documents require that the contractor prepare and implement a site specific Discharge Plan for well development and pump testing that meets requirements. Provide plan to applicable jurisdictions and/or RWQCB. Monitor to ensure that the contractor implements measures in the Discharge Plan as required. Report noncompliance and ensure corrective action. 	<ol style="list-style-type: none"> Design Construction
		<ul style="list-style-type: none"> The SFPUC shall notify affected stormwater agencies of the volume, rate, and location of the planned discharge at least 14 days before discharging. The discharged water shall not exceed 50 NTU. Turbidity shall be monitored every 15 minutes during the first hour of operation of any sedimentation or filtration device used to meet discharge limitations and once every two hours thereafter. If turbidity limits are exceeded for more than two hours, the discharge shall be terminated until turbidity limits can be complied with. The pH of the discharged water shall be within the range of 6.5 and 8.5 and pH shall be measured once per day during the discharge. The discharged water shall not cause pollution, contamination, or nuisance. The discharged water shall not cause scouring or erosion at the point of discharge of downstream from the discharge. Self-Monitoring Reports shall be submitted no later than 30 days following the last day of each month in which the 				

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>discharges occur. These reports shall summarize turbidity measurements and approximate volumes of the discharges.</p> <p>The construction contractor(s) shall comply with all monitoring and reporting requirements established by the RWQCB for discharges to storm drainage system. Any failure to achieve/maintain established narrative or numeric water quality objectives shall be reported to the RWQCB and corrective action taken. Corrective action may include an increase in residence time in treatment features (e.g., longer holding time in settling tanks) and/or incorporation of additional treatment measures, which could include but are not limited to the addition of sand filtration prior to discharge.</p>				
HY-6	<p>Project operation would decrease the production rate of existing nearby irrigation wells due to localized groundwater drawdown within the Westside Groundwater Basin such that existing or planned land use(s) may not be fully supported.</p>	<p>Mitigation Measure M-HY-6: Ensure Irrigators' Wells Are Not Prevented from Supporting Existing or Planned Land Use(s) Due to Project Operation</p> <p>This mitigation measure is organized into four sections, as follows:</p> <ul style="list-style-type: none"> • Performance Standard • Method for Determining Whether Inability to Meet the Performance Standard at an Irrigator's Well Is Due to the Project • Mitigation Actions to be Undertaken to Meet the Performance Standard • Irrigation Well Monitoring and Reporting Program <p>Determinations required by this mitigation measure are subject to the concurrence of the San Francisco Planning Department's Environmental Review Officer (ERO) as identified below. The ERO may require the SFPUC to hire an independent expert to advise the ERO.</p> <p><i>Performance Standard:</i> The SFPUC shall ensure that existing irrigators' wells are not damaged, and that the production capacity at existing irrigators' wells is equivalent to either (1) the existing production capacity of the wells, or (2) is sufficient to meet peak irrigation demand at the existing and planned land uses, whichever is less, provided that any potential well damage or loss of capacity is determined to be caused by the Project.</p> <p>If overlying irrigators install new wells to support irrigation needs of existing and planned land uses, at the time any such new wells are installed, the SFPUC shall add the new wells to the Irrigation Well Monitoring and Reporting Program and through the monitoring program and in consultation with the irrigator, establish the baseline production capacity for the new wells and determine peak irrigation demand needed to support the existing and planned land uses. The SFPUC shall then ensure that the new irrigators' wells are not damaged, and that the production capacity at the new irrigators' wells is equivalent to either (1) the baseline production capacity of the wells, or (2) is sufficient to meet peak irrigation demand at the existing and planned land uses, whichever is less, provided that any potential well damage or loss of capacity is determined to be caused by the Project.</p> <p>The SFPUC shall ensure that the Performance Standard is met by: 1) undertaking actions under SFPUC control, such as redistributing pumping or reducing or ceasing pumping as described below in mitigation actions #1 and #2; or 2) making an SFPUC replacement water supply available to any potentially affected irrigator as described below in mitigation action #3, and 3) undertaking actions requiring agreement with irrigators, such as modifying irrigators' wells or irrigation systems as described below in mitigation actions #4 through #9. The SFPUC shall implement mitigation actions, individually or in combination, so that water supply provided to the land use is not interrupted.</p> <p>Prior to Project operation, the SFPUC, working with any irrigators willing to be consulted, shall identify a well interference groundwater impact level for each existing irrigation well, based on available monitoring data from existing irrigation wells and considering well characteristics. The well interference groundwater impact level shall be the lowest groundwater level that will avoid conflict with the Performance Standard, and it will be established prior to Project operation. The well interference groundwater impact levels will be subject to concurrence by the ERO. If monitoring data and extrapolated trends predict that</p>	<ol style="list-style-type: none"> 1. SFPUC Water Enterprise, WRD (certified hydrogeologist or professional engineer) 2. SFPUC Water Enterprise, WRD (certified hydrogeologist or professional engineer) 3. SFPUC EMB 4. SFPUC Water Enterprise, WRD 5. SFPUC Water Enterprise, WRD 6. SFPUC Water Enterprise, WRD 7. SFPUC Water Enterprise, WRD 	<ol style="list-style-type: none"> 1. SFPUC BEM/ERO (+ independent expert, if needed) 2. SFPUC BEM 3. SFPUC BEM 4. SFPUC BEM/ERO (+ independent expert, if needed) 5. SFPUC BEM/ERO (+ independent expert, if needed) /well owner 6. SFPUC BEM/ERO (+ independent expert, if needed) /well owner 7. SFPUC BEM/ERO (+ independent expert, if needed) /well/owner/San Mateo County [well permits] 	<ol style="list-style-type: none"> 1. Develop and implement an Irrigation Well Monitoring and Reporting Program. <ol style="list-style-type: none"> a. Contact irrigators 18 months or more before Project operation regarding program. b. Install flow meters and report flow meter and groundwater level data to well owner; daily results for 1 year; at least monthly thereafter during take periods and yearly during put and hold periods. c. Conduct pump tests and collect specified data on each well; report results to well owner d. Provide advance notice to well owner of Take periods. e. Continue monitoring for longer of 17 years or period from beginning of Project Operation through 5 take years. f. Submit monitoring reports to ERO; obtain ERO concurrence for any recommended revision to monitoring program. 2. Determine a well interference groundwater impact level for each existing irrigation well, based on monitoring data from the Irrigation Well Monitoring and Reporting Program. 3. Ensure that contract documents require replacement water supply connections at all existing irrigation well properties; install replacement water supply connects; implement appropriate mitigation for Mitigation Action #3 per Table MMRP-2. 4. Add any new irrigation wells to the Irrigation Well Monitoring and Reporting 	<ol style="list-style-type: none"> 1. Pre-Operation/ Operation (reporting monthly or yearly for at least 17 years) 2. Pre-Operation 3. Design/ Operation 4. Operation 5. Operation 6. Operation (provide replacement water within 24 hours of request until no longer required) 7. Operation

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		the well interference groundwater impact level would be reached within the ensuing six months due to Project operation, the SFPUC shall initiate implementation of one or more of the mitigation actions before the groundwater impact level is reached to allow sufficient time to have the most appropriate mitigation in place that would result in meeting the Performance Standard.			Program; implement program per Monitoring and Report Action #1.	
HY-6 (cont.)		Method for Determining Whether Inability to Meet the Performance Standard at an Irrigators' Well(s) Is Due to the Project: An irrigator may provide written notice, supported by an expert determination, that the Project is causing observed unanticipated well capacity effects; or the SFPUC may anticipate based on monitoring data that the Performance Standard will not be met at a future date based on Project operation. The SFPUC will use best efforts to provide a minimum of six months written notice to irrigators that monitoring shows a trend that the Performance Standard may not be met. The procedure for determining if the effect is due to the Project, and the SFPUC response, is as follows.			5. If monitoring shows Performance Standard may not be met within 6 months, notify well owner and provide replacement water or take other immediate mitigation actions and continue such action until permanent mitigation action is coordinated with the well owner and is in place.	
HY-6 (cont.)		<p>A. Presumption of Effect</p> <p>Any observed inability to meet the Performance Standard at an irrigation well(s) is assumed to be caused by the Project if: 1) it is temporally correlated with the onset of increased Project pumping; 2) it occurs in an area predicted (by this EIR or by the SFPUC's ongoing monitoring) to be affected by well interference; 3) static groundwater levels have dropped; 4) pumping groundwater levels have not dropped more than static groundwater levels (if pumping groundwater levels drop more than static groundwater levels, it could indicate the drop in production capacity is due to increased well inefficiency unrelated to the Project); and 5) no other obvious and substantiated reason exists for these effects.</p> <p>B. Information Required to Determine Effect</p> <p>To support the determination as to whether an observed loss of pumping capacity is due to the Project, the SFPUC shall develop, and share with irrigation well owners at least the following information:</p> <ul style="list-style-type: none"> • <i>Item 1. Reduction of pumping capacity is temporally correlated with the onset of increased Project pumping.</i> The SFPUC shall develop a graph that shows the pumping of Project and Partner Agency wells within 1.5 miles of the irrigator's well over time, compared to the production capacity of the irrigator's well over the same period. • <i>Item 2. Reduction of pumping capacity occurs in an area predicted to be affected by well interference.</i> The SFPUC shall calculate the cone of depression, using the same methodology as used in evaluating the impact in the EIR, at Project and Partner Agency wells within 1.5 miles of the irrigator's well, as well as at the irrigator's well. • <i>Items 3 and 4. Static groundwater levels have dropped and pumping groundwater levels have not dropped more than static water levels.</i> The SFPUC shall develop a graph showing the difference between static and pumping water levels at the irrigator's well over time. • <i>Item 5. Another substantiated reason exists for the inability to meet the Performance Standard.</i> If warranted, the SFPUC shall provide a written conclusion, based on verifiable evidence, that a reason other than the Project is causing the inability to meet the Performance Standard. 			<p>6. If required by well owner request, provide replacement water within 24 hours of request; determine if inability to meet irrigation needs is due to the project; continue providing replacement water until matter resolved or permanent mitigation action is coordinated with the well owner and in place.</p> <p>a. Prepare and report to well owner within 30 days site specific information and determination of whether project is causing effect.</p> <p>b. If SFPUC determines Project is not cause of effect, obtain ERO concurrence; provide 30-day notice of suspended delivery of replacement water.</p> <p>c. If well owner disputes suspended delivery, continue to provide replacement water until resolved by mediation or arbitration.</p> <p>7. If SFPUC determines Project is causing well interference effect, implement permanent mitigation action.</p> <p>a. Work with well owner to determine appropriate long-term action.</p> <p>b. Carry out or pay well owner to carry out mitigation action. If SFPUC carries out action, design and contract for work; implement any appropriate mitigation measures for Mitigation Actions #6, #7, #8, #9 per Table MMRP-2.</p>	

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
HY-6 (cont.)		<p>C. Process for Responding to Written Notice from Irrigator</p> <ol style="list-style-type: none"> If an irrigator submits a written notice requesting the SFPUC replacement water supply where they believe that the Project is causing observed unanticipated well capacity effects, the SFPUC shall provide SFPUC replacement water within 24 hours and then determine whether the Project is causing the effect within 30 days of providing the SFPUC replacement water. If the SFPUC determines that the Project is not causing a conflict with the Performance Standard, an irrigator may object to the SFPUC determination within 30 days, and, if such an objection is received, the SFPUC shall make a final conclusion within 30 days of receipt of such objection. The determination whether or not the inability to meet the Performance Standard is due to the Project is subject to ERO concurrence. If the ERO concurs with the SFPUC's determination that the Project is not the cause of the effect, the SFPUC will provide the irrigator with 30 days' notice of the suspension of delivery of SFPUC replacement water supply, and all water previously delivered would be charged to the irrigator at the SFPUC retail rate. Any remaining dispute between the SFPUC and the irrigator may be resolved through voluntary mediation or arbitration; if the matter is submitted to mediation or arbitration, the SFPUC will continue to provide SFPUC replacement water until otherwise required by the mediation or arbitration. <p>D. SFPUC Response if Project is Causing Effect</p> <p>If the SFPUC determines in response to a claim by an irrigator that the Project is causing the effect or the SFPUC predicts the effect, after first considering mitigation actions #1 - 3, the SFPUC shall recommend one or a combination of mitigation actions #4 - 9 to the irrigator. The SFPUC shall work with the irrigator to identify the appropriate mitigation action(s) for the affected irrigation well. The SFPUC shall carry out (or pay the irrigator to carry out) the mitigation action(s). The SFPUC shall continue to provide the SFPUC replacement water supply until the agreed upon mitigation action(s) is completed.</p> <p>Mitigation Actions to be Undertaken to Meet the Performance Standard: Specific mitigation actions that may be required to ensure that the Performance Standard is met are listed below. In addition, the SFPUC may implement other, similar measures that the affected irrigator and the SFPUC agree will provide equally effective mitigation for well interference impacts. The determination that similar measures will provide equally effective mitigation is subject to ERO concurrence.</p> <p>Mitigation actions fall into the following three categories:</p> <p>A. Mitigation Actions under SFPUC Control</p> <p>Mitigation Action #1: Redistribute GSR pumping. The SFPUC would redistribute Project pumping from affected areas to other areas; however, in no case would redistribution be undertaken where the resulting groundwater levels would then decline to a level that would cause a significant well interference impact at another irrigation well. This mitigation action is expected to be an interim measure, implemented until such time as an alternate measure can be implemented that also mitigates the impact to less-than-significant levels without compromising Project objectives. The periodic analyses of data from the Irrigation Well Monitoring and Reporting Program would continue while this action is undertaken. The action would cease when the data analysis demonstrates that the Performance Standard is met without continued redistribution of GSR pumping, or, if an interim measure, until an alternative measure is in place.</p>			<p>c. Continue to provide replacement water as needed until permanent mitigation action is implemented.</p> <p>d. Obtain ERO approval for any unlisted mitigation action that will achieve Performance Standard.</p>	
HY-6 (cont.)		<p>Mitigation Action #2: Reduce GSR pumping. The SFPUC would reduce Project pumping (including a cessation in Project pumping) at wells in the vicinity of affected irrigation wells. This mitigation action is expected to be an interim measure, implemented until such time as an alternate measure can be implemented that also mitigates the impact to less-than-</p>				

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>significant levels without compromising Project objectives. The periodic analyses of data from the Irrigation Well Monitoring and Reporting Program would continue while this action is undertaken. The action would cease when the data analysis demonstrates that the Performance Standard is met without continued reduction of GSR pumping, or, if an interim measure, until an alternative measure is in place</p> <p>B. SFPUC Provision of a Replacement Water Supply</p> <p>Mitigation Action #3: Replace irrigation water source. As part of the Project and prior to Project operation, SFPUC will install for irrigators new metered supply connections of SFPUC water from the SFPUC’s regional water system or SFPUC will wheel SFPUC replacement water through the Cal Water distribution system to connections Cal Water provides to irrigators. Connections to the regional water system or distribution systems will consist of permanent below-ground connections.</p> <p>Under this Mitigation Measure M-HY-6, the SFPUC shall provide the SFPUC replacement water to irrigators under two circumstances: 1) if an irrigator provides written notice to the SFPUC supported by an expert determination that the Project is causing observed unanticipated well capacity effects; or 2) if the SFPUC monitoring data show that the Performance Standard will not be met and the SFPUC prefers to provide SFPUC replacement water in order to meet the Performance Standard. The irrigator’s expert determination will be a written professional opinion of a certified hydrogeologist or a professional engineer with expertise in groundwater hydrology, water supply wells, and water well technology. Under either of these circumstances, the SFPUC shall open the new standby supply connection to the irrigator to provide SFPUC water for irrigation to the irrigator. In the first instance where the SFPUC replacement water supply is provided in response to notice from an irrigator, the SFPUC shall continue to provide the SFPUC replacement water supply while it makes an initial determination regarding whether Project operation caused the observed effect and if required to do so by the mediation or arbitration in a case where it disputes whether the Project is causing the effect (as explained above under the heading, Method to Determine Whether Inability to Meet the Performance Standard at an Irrigators’ Well[s] Is Due to the Project). In the event the SFPUC determines that the Project is causing the effect, or if the SFPUC provides the SFPUC replacement water supply because its monitoring predicts an effect, the SFPUC shall continue to provide the SFPUC replacement water supply as needed until it can implement another mitigation action. The SFPUC estimates that the SFPUC replacement water supply would be provided on an interim basis for about one year or less, until an alternative measure is in place.</p> <p>If the SFPUC provides the replacement water on its own initiative or the irrigator requests the water and the Project is determined to have caused the effect, the SFPUC will charge for the water supply at the rate equivalent to the irrigator’s cost of groundwater production, as adjusted annually for inflation using the Consumer Price Index or other agreed-upon index. If the irrigator requests the water and the Project is subsequently determined to have not caused the effect, then the SFPUC will charge for the replacement water supply at a rate equivalent to the regular SFPUC rate.</p>				
HY-6 (cont.)		<p>C. Mitigation Actions Requiring Agreement with Irrigators</p> <p>Mitigation Action #4: Improve irrigation efficiency. The SFPUC would install or completely fund measures to reduce applied water demand through irrigation efficiency measures, such as installation of more efficient sprinkler heads or soil-moisture sensors.</p> <p>Mitigation Action #5: Modify irrigation operations. The SFPUC would install or completely fund measures to reduce applied water demand through modification of irrigation operation, such as the use of longer irrigation cycles to meet the same irrigation demand or revised scheduling of irrigation to respond to evapotranspiration data, as appropriate given the affected</p>				

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>land use.</p> <p>Mitigation Action #6: Lower pump in irrigation well. The SFPUC would lower the pump or completely fund lowering the pump in an irrigator’s well to accommodate water level fluctuations induced by Project pumping.</p> <p>Mitigation Action #7: Lower and change pump in irrigation well. The SFPUC would lower and replace or completely fund the lowering and replacement of the well pump using a more suitable pump for the conditions that are encountered in order to meet irrigation demand.</p> <p>Mitigation Action #8: Add storage capacity for irrigation supply. The SFPUC would add or completely fund storage (e.g., an above-ground tank with suitable shielding landscaping, if necessary) to offset reduced well capacity caused by Project operation. In such cases, the SFPUC shall obtain or pay the irrigator to obtain any necessary permits for the work.</p> <p>Mitigation Action #9: Replace irrigation well. The SFPUC would replace an irrigators’ well(s), remove above-ground pumping equipment for any replaced well(s) and properly close such wells in accordance with State and local law or completely fund the actions. The SFPUC or the irrigator would obtain well permits from the San Mateo County Department of Environmental Health. The replaced irrigation well will be included in the Irrigation Well Monitoring and Reporting Program and covered by the Performance Standard contained in this Mitigation Measure M-HY-6.</p>				
HY-6 (cont.)		<p>Irrigation Well Monitoring and Reporting Program: The SFPUC shall monitor and report short- and long-term changes in groundwater conditions and operations at irrigators’ wells. All monitoring and data collection will be conducted as defined in the Irrigation Well Monitoring and Reporting Program. The SFPUC will provide advance notice to irrigation well owners regarding the start of Project operations during Take periods.</p> <p>At least 18 months prior to start of Project operation, the SFPUC shall contact existing irrigators with information about the Irrigation Well Monitoring and Reporting Program. The monitoring program shall include the installation of a flow meter to allow for daily well production volumes to be recorded and a groundwater level transducer/data logger (a device for automatically detecting and recording groundwater levels) for measuring groundwater levels at the irrigators’ wells. Baseline monitoring of flow meter data and groundwater level data in the irrigators’ well shall be collected and reported to participating well owners as defined in the Irrigation Well Monitoring and Reporting Program. In addition to baseline monitoring of well production and groundwater levels, pumping tests at irrigators’ wells shall be conducted prior to Project operation to collect baseline data on pump and well performance, and results shall be reported to irrigators. The pumping tests shall collect data on well capacity and drawdown, well specific capacity, pump efficiency and head-capacity characteristics, sand content, and may include selected water quality parameters.</p> <p>The SFPUC shall also collect any existing information and data available regarding the irrigators’ well(s) from the irrigator, including any estimates or measurements of historical, existing, and planned land and water use (e.g., driller’s logs, water level data, pumping records, acres irrigated) to provide information upon which to evaluate the performance of the irrigators’ well(s) over time and to establish baseline operating conditions. When there is an opportunity to open an existing irrigator’s well (such as when a pump is removed by a well owner), the SFPUC may seek to conduct video log surveys in such wells to determine the condition of the well structure. The SFPUC may conduct periodic re-testing of a well as prompted by the need to evaluate performance throughout the life of the Project.</p> <p>Following the start of Project operations, if there is uncertainty or disagreement about whether the Project is responsible for a loss in production capacity at an irrigator’s well, the SFPUC shall undertake more frequent monitoring and/or testing and shall</p>				

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>timely provide the well owner with all data, reports, and information collected concerning well production capacity.</p> <p>Data from the water level transducers/data loggers and flow meters shall be recorded daily during the first year. Following the first year of data collection, the frequency may be modified (e.g., as prompted by a need to evaluate pump and/or well performance to determine effects of the Project), but in no case will data collection and recording take place less frequently than once per month during Take Periods. The SFPUC shall provide participants with 14-day advance notice for site visit(s), which would be scheduled within a 48-hour window.</p> <p>Data shall be analyzed and reported to irrigators at a frequency identified in the Irrigation Well Monitoring and Reporting Program. Data analysis shall be conducted when production capacity can be compared to peak demand prior to the peak demand period, when pumping is underway during the beginning of the irrigation season, when groundwater levels will likely be lowest at the end of the peak irrigation season, and when production capacity of the well would be at its lowest.</p>				
HY-6 (cont.)		<p>The SFPUC's certified hydrogeologist or professional engineer with expertise in groundwater hydrology shall compile, analyze and report the collected data to participating irrigators within the timeframe identified in the Irrigation Well Monitoring and Reporting Program. In Project Put and Hold Periods, the SFPUC shall compile, analyze, and report the collected data to irrigators and the ERO at least once per year.</p> <p>Monitoring of all irrigators' wells shall continue during the period that is the longer of: 1) 17 years (twice the 8.5-year design drought cycle analyzed in the EIR); or 2) the period including the first five Take Years of the Project beginning at the initiation of Project operation. After this initial period of monitoring, the SFPUC, in consultation with the irrigators, shall evaluate the effectiveness of the Irrigation Well Monitoring and Reporting Program and determine if data collection, monitoring, and reporting frequencies and other procedures should be revised or eliminated. Proposed changes to the Program, including a reduction in the frequency of monitoring, will be subject to ERO concurrence.</p>				
HY-9	Project operation could have a substantial, adverse effect on water quality that could affect the beneficial uses of Lake Merced.	<p>M-HY-9a: Lake Level Monitoring and Modeling for Lake Merced</p> <p>The SFPUC shall implement lake level monitoring and modeling in accordance with the process described below. The SFPUC will conduct monitoring to detect changes in lake level and water quality, as well as groundwater-level elevations. Implementation of this measure shall be coordinated with the SFPUC's ongoing Lake Merced lake-level, water quality, and groundwater monitoring programs to document and maintain the database of these parameters throughout Project operations.</p> <p>The SFPUC shall continue to maintain the Lake-level Model so as to be able to evaluate what lake levels may have been without implementation of the Project based on the actual hydrology that occurs during Project implementation. As described below, the SFPUC shall use the model to determine the amount of lake-level change that is attributable to the Project rather than to hydrologic or other factors.</p>	1. SFPUC Water Enterprise, WST/WRD	1. SFPUC Water Enterprise, WRD	1. Maintain lake-level model and conduct lake level monitoring.	1. Pre-operation/ Operation
HY-9 (cont.)	Project operation could have a substantial, adverse effect on water quality that could affect the beneficial uses of Lake Merced.	<p>M-HY-9b: Lake Level Management for Lake Merced</p> <p>Prior to beginning operation of the Project, the SFPUC shall implement this lake level management program as follows:</p> <ul style="list-style-type: none"> • If lake levels are within the range that would occur without the Project based on maintenance of the Lake-level Model, no corrective action shall be required. • If lake levels are below the range that would have occurred without the Project (Table MMRP-1), corrective action shall be implemented in time to prevent lake levels from declining as a result of Project-related pumping below 0 feet City Datum or 	1. SFPUC Water Enterprise, WST	1. SFPUC Water Enterprise, WRD	1. Implement lake level management program. Implement corrective actions to reduce or supplement lake levels as provided in Table MMRP-1, attached.	1. Pre-operation/ Operation

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>the level that would occur without the Project, whichever is lower. One or both of the following corrective actions shall be implemented:</p> <ul style="list-style-type: none"> – Redistribute pumping to decrease Project pumping rates in the vicinity of Lake Merced or decrease the overall Project pumping rate. However, in no case would redistribution be undertaken where groundwater levels would decline more than from the Project as originally predicted by modeling. – Augment lake levels through the addition of supplemental water (such as potable water that is dechloraminated at the Lake Merced Pump Station, stormwater from the Vista Grande Drainage Canal, recycled water, or stormwater diverted from other development in the Lake Merced watershed), if available. 				
HY-14	Project operation may have a substantial adverse effect on groundwater depletion in the Westside Groundwater Basin over the very long term.	<p>M-HY-14: Prevent Groundwater Depletion</p> <p>The SFPUC, working in conjunction with the GSR Operating Committee, shall develop and adopt an SFPUC Storage Account monitoring program that will determine the amount of water available for extraction from the SFPUC Storage Account and develop accounting rules that will account for losses from the Basin due to leakage, consistent with the terms of the Operating Agreement between the SFPUC and the Partner Agencies. The SFPUC shall develop the SFPUC Storage Account monitoring program to determine the balance in the SFPUC Storage Account based on actual experience operating in the Westside Groundwater Basin as proposed under the GSR Project. The SFPUC Storage Account monitoring program will use data from metered SFPUC in-lieu water deliveries to the Partner Agencies and regularly measured changes in groundwater elevations during a series of Put and Hold Years to determine the volume of stored water. Rules to account for losses in groundwater storage will be based on generally accepted principles of groundwater management. The following is an example of a methodology that the SFPUC, in coordination with the Partner Agencies, could use for determining the amount of water available for extraction taking into account losses from the Basin due to leakage:</p>	<ol style="list-style-type: none"> 1. SFPUC Water Enterprise, WRD/GSR Operating Committee 2. SFPUC Water Enterprise, WST 3. SFPUC Water Enterprise, WRD/GSR Operating Committee 	<ol style="list-style-type: none"> 1. SFPUC Water Enterprise, WRD 2. SFPUC Water Enterprise, WRD 3. SFPUC Water Enterprise, WRD 	<ol style="list-style-type: none"> 1. In conjunction with GSR Operating Committee, develop and implement an SFPUC Storage Account monitoring program 2. Monitor groundwater levels through monitoring network. 3. Determine amount of water in storage account while accounting for losses. 	<ol style="list-style-type: none"> 1. Pre-operation 2. Operation (record daily, collect quarterly, compile annually) 3. Operation
HY-14 (cont.)		<p>Part A: For calculation of increases in the SFPUC Storage Account due to in-lieu deliveries and decreases in the SFPUC Storage Account due to Project pumping.</p> <p>A1. On an annual basis, the SFPUC would account for additions to the SFPUC Storage Account by calculating the amount of supplemental water it delivers to Partner Agencies.</p> <p>A2. On an annual basis, the SFPUC and the Partner Agencies would account for the amount of Project pumping that occurs.</p> <p>A3. The SFPUC would calculate a running total of the volume of water in the SFPUC Storage Account (before accounting for losses due to leakage) using data from A1 and A2 above.</p>				
HY-14 (cont.)		<p>Part B: For calculation of decreases in the SFPUC Storage Account due to leakage from the Westside Groundwater Basin.</p> <p>B1. The SFPUC would use its monitoring network to record on a daily frequency, collect on a quarterly frequency, and compile on an annual basis, groundwater level measurements from its monitoring wells. This information would be used in item B4 below.</p> <p>B2. The SFPUC would subdivide the Westside Groundwater Basin into areas (subareas) which have similar geologic and groundwater level responses and similar influence on groundwater storage and calculate the areal extent of each subarea. (Note: subdividing the Westside Basin into subareas allows for a more accurate estimate of storage changes.)</p>				

EXHIBIT 1 (continued)

REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
		<p>B3. The SFPUC would assign each of the subareas a storage coefficient value derived from short-term aquifer testing and interpretation of aquifer characteristics under longer-term recharge and pumping conditions.</p> <p>B4. The SFPUC would multiply changes in groundwater levels that occur during Hold Years in each subarea by the aquifer's storage coefficient value and areal extent of each subarea to quantify the change in aquifer storage that has occurred. This change in storage, if reflective of a decline in groundwater levels, would be equivalent to the "loss" that occurs in that subarea due to Basin leakage.</p> <p>B5. The SFPUC would calculate the sum of each subarea's change in storage, which would equal the total groundwater depletion that has occurred during Hold Years. The SFPUC would then subtract the total from the SFPUC Storage Account to derive an SFPUC Storage Account value that accounts for losses due to leakage from the Westside Groundwater Basin.</p>				
HAZARDS AND HAZARDOUS MATERIALS						
HZ-2	The Project would result in a substantial adverse effect related to reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction.	<p>HZ-2a: Preconstruction Hazardous Materials Assessment (All Sites)</p> <p>Within three months prior to construction, the SFPUC shall retain a qualified environmental professional to conduct a regulatory agency database review to update and identify hazardous materials sites within 0.25 mile of a well facility site and to review appropriate standard information sources to determine the potential for soil or groundwater contamination at the project sites. Should this review indicate a high likelihood of encountering contamination at the proposed facility sites, follow-up sampling shall be conducted to characterize soil and groundwater quality prior to construction to provide necessary data for the site health and safety plan (Mitigation Measure M-HZ-2b) and hazardous materials management plan (Mitigation Measure M-HZ-2c). If needed, site investigations or remedial activities shall be performed at facility sites in accordance with applicable laws and regulations.</p>	1. SFPUC CMB (environmental professional)	1. SFPUC BEM	1. An environmental professional (whose credentials have been verified) shall conduct a regulatory agency database review to update and identify hazardous materials sites within 0.25 mile of each selected well site, shall determine the potential for soil or groundwater contamination at the selected well sites, and shall perform follow-up analysis as required in this measure. Document findings in a report or technical memo to SFPUC.	1. Pre-Construction, within 3 months.
HZ-2 (cont.)	The Project would result in a substantial adverse effect related to reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction.	<p>M-HZ 2b: Health and Safety Plan (All Sites)</p> <p>The construction contractor shall, prior to construction, prepare a site-specific health and safety plan in accordance with federal OSHA regulations (29 CFR 1910.120) and Cal-OSHA regulations (8 CCR Title 8, Section 5192) to address worker health and safety issues during construction. The health and safety plan shall identify the potentially present chemicals, health and safety hazards associated with those chemicals, all required measures to protect construction workers and the general public from exposure to harmful levels of any chemicals identified at the site (including engineering controls, monitoring, and security measures to prevent unauthorized entry to the work area), appropriate personal protective equipment, and emergency response procedures. The health and safety plan shall designate qualified individuals responsible for implementing the plan and for directing subsequent procedures in the event that unanticipated contamination is encountered.</p>	1. SFPUC EMB 2. SFPUC CMB 3. SFPUC CMB	1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM	1. Ensure that contract documents include the requirement for preparing a health and safety plan. 2. Ensure that contractor(s) prepares and submits a health and safety plan and verify that it includes information cited in contract documents. 3. Monitor to ensure that the contractor(s) implements measures in the contract documents and health and safety plan. Report noncompliance, and ensure corrective action.	1. Design 2. Construction 3. Construction
HZ-2 (cont.)	The Project would result in a substantial adverse effect related to reasonably foreseeable upset and accident conditions involving the release of hazardous materials	<p>M-HZ-2c: Hazardous Materials Management Plan (All Sites)</p> <p>The contractor shall, prior to construction, prepare a hazardous materials management plan that specifies the method for handling and disposal of both chemical products and hazardous materials during construction and contaminated soil and groundwater, should any be encountered during construction. Contract specifications shall mandate full compliance with all applicable local, State, and federal regulations related to identifying, transporting, and disposing of hazardous materials, including hazardous building materials (i.e., asbestos containing materials, lead-based paint, and electrical equipment) and any hazardous wastes encountered in excavated soil or groundwater. The contractor shall provide the SFPUC with copies of hazardous waste manifests documenting that disposal of all hazardous materials has been performed in accordance with the</p>	1. SFPUC EMB 2. SFPUC CMB 3. SFPUC CMB	1. SFPUC BEM 2. SFPUC BEM/San Mateo County, if hazardous materials management plan is required 3. SFPUC BEM	1. Ensure that contract documents include requirements for preparing a hazardous materials management plan. 2. Ensure that contractor(s) prepares and submits to SFPUC and San Mateo County a hazardous materials management plan and verify that it complies with requirements cited in contract documents.	1. Design 2. Construction 3. Construction

EXHIBIT 1 (continued)
REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT (CASE NO. 2008.1396E) – MITIGATION MONITORING AND REPORTING PROGRAM

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
	into the environment during construction.	<p>law.</p> <p>If contaminated soil or groundwater is encountered, the SFPUC shall require the construction contractor to prepare and implement a construction Soil and Groundwater Management Plan. The contractor shall submit the Plan to the SFPUC and the San Mateo County Department of Health Services, Groundwater Protection Program, for review and approval. Elements of the plan shall include:</p> <ul style="list-style-type: none"> • Measures to address hazardous materials and other worker health and safety issues during construction, including the specific level of protection required for construction workers. • Provisions for excavation of soil, stockpiling, dust, and odor control measures. • Measures to prevent off-site migration of contaminated soil and groundwater. • Location and final disposition of all soil and groundwater removed from the site. • All other necessary procedures to ensure that excavated materials are stored, managed, and disposed of in a manner that is protective of human health and in accordance with applicable laws and regulations. 			3. Monitor to ensure that the contractor(s) implements measures in the contract documents and hazardous materials management plan. Report noncompliance, and ensure corrective action.	

CCSF = City and County of San Francisco
SFPUC = San Francisco Public Utilities Commission (CCSF)
BEM = Bureau of Environmental Management (SFPUC)
EMB = Engineering Management Bureau (SFPUC)
CMB = Construction Management Bureau (SFPUC)
WST = Water Supply and Treatment, Water Enterprise (SFPUC)
WRD = Water Resources Division, Water Enterprise, (SFPUC)
EP = San Francisco Planning Department, Environmental Planning Division (CCSF)
ERO = Environmental Review Officer (CCSF – EP)
VA = US Department of Veterans Affairs
CDFW = California Department of Fish and Wildlife
SWRCB = State Water Resources Control Board
RWQCB = Regional Water Quality Control Board

**TABLE MMRP-1
LAKE MERCED WATER SURFACE ELEVATION RANGE FOR AVOIDANCE OF
SIGNIFICANT SURFACE WATER INTERACTION EFFECTS^a**

Water Surface Elevation Without the Project (feet City Datum)	Corresponding Allowable Project-Related Water Surface Elevation Range (feet City Datum)			Allowable Increment of Change as a Result of Project	Trigger Level for Additional Actions (feet City Datum)
	Wetlands	Water Quality	Combined Range ^b		
13	13 to -10	0 to 13	0 to 13	Up to 13 feet of decline	0
12	4 to 12	0 to 12	4 to 12	Up to 8 feet of decline	4
11	9 to 11	0 to 11	9 to 11	Up to 2 feet of decline	9
10	9 to 10	0 to 10	9 to 10	Up to 1 foot of decline	9
9	8 to 9	0 to 9	8 to 9	Up to 1 foot of decline	8
8	7 to 8	0 to 8	7 to 8	Up to 1 foot of decline	7
7	4 to 7	0 to 7	4 to 7	Up to 3 feet of decline	4
6	5 to 6	0 to 6	5 to 6	Up to 1 foot of decline	5
5	4 to 5; -6 to -10	0 to 5	4 to 5	Up to 1 foot of decline	4
4	3 to 4; -5 to -10	0 to 4	3 to 4	Up to 1 foot of decline	3
3	2 to 3; -5 to -10	0 to 3	2 to 3	Up to 1 foot of decline	2
2	1 to 2; -4 to -10	0 to 2	1 to 2	Up to 1 foot of decline	1
1	0 to 1; -3 to -10	0 to 1	1	Up to 1 foot of decline	0
0	0 to -10	0	0	No decline permitted	0
-1	-1 to -10	-1	-1	No decline permitted	-1
-2	-2 to -10	-2	-2	No decline permitted	-2
-3	-3 to -10	-3	-3	No decline permitted	-3
-4	-4 to -10	-4	-4	No decline permitted	-4
-5	-5 to -10	-5	-5	No decline permitted	-5
-6	-6 to -10	-6	-6	No decline permitted	-6
-7	-7 to -10	-7	-7	No decline permitted	-7
-8	-8 to -10	-8	-8	No decline permitted	-8
-9	-9 to -10	-9	-9	No decline permitted	-9
-10	-10	-10	-10	No change; lake would be dewatered as a result of climatic conditions	-10

^a The water surface elevation values represent the mean annual water surface elevation. Lake Merced water levels vary seasonally due to hydrologic and climatic conditions; therefore, an annual range in water surface elevation from about 1 foot above and below the mean is assumed; for example, an elevation of 6 feet City Datum, as seen in the table, actually represents a range in water surface elevation between of 5 and 7 feet City Datum.

^b The combined range is the maximum and minimum mean annual water surface elevation that would avoid net loss of wetlands and substantial adverse effects on water quality.

SOURCE: ESA (wetlands information derived from San Francisco Groundwater Supply Project EIR, Appendix C tables)

**TABLE MMRP-2
MITIGATION MEASURES APPLICABLE TO
MITIGATION ACTIONS 3, 6, 7, 8, AND 9 OF MITIGATION MEASURE HY-6**

Mitigation Measure HY-6 Mitigation Actions	GSR Project Mitigation Measures Applicable to secondary impacts M-HY-6 Mitigation Actions
Mitigation Action #3: Replace Irrigation Water Source	Mitigation Measure M-AE-1a: Site Maintenance
	Mitigation Measure M-AE-3a: Implement Landscape Screening
	Mitigation Measure M-NO-1: Noise Control Plan
	Mitigation Measure M-AQ-2a: BAAQMD Basic Construction Measures
	Mitigation Measure M-TR-1: Traffic Control Plan
	Mitigation Measure M-CR-2: Discovery of Archaeological Resources
	Mitigation Measure M-CR-3: Suspend Construction Work if a Paleontological Resource is Identified
	Mitigation Measure M-CR-4: Accidental Discovery of Human Remains
	Mitigation Measure M-UT-4: Waste Management Plan
	Mitigation Measure M-UT-1a: Confirm Utility Line Information
	Mitigation Measure M-UT-1b: Safeguard Employees from Potential Accidents Related to Underground Utilities
	Mitigation Measure M-UT-1c: Notify Local Fire Departments
	Mitigation Measure M-UT-1d: Emergency Response Plan
	Mitigation Measure M-UT-1e: Advance Notification
	Mitigation Measure M-UT-1f: Protection of Other Utilities during Construction
	Mitigation Measure M-UT-1g: Ensure Prompt Reconnection of Utilities
	Mitigation Measure M-UT-1h: Avoidance of Utilities Constructed or Modified by Other SFPUC Projects
Mitigation Measure M-UT-1i: Coordinate Final Construction Plans with Affected Utilities	
Mitigation Measure M-BR-1a: Protection Measures during Construction for Special status Birds and Migratory Passerines and Raptors	
Mitigation Action #3: Replace Irrigation Water Source (continued)	
	Mitigation Measure M-BR-1b: Protection Measures for Special-status Bats during Tree Removal or Trimming
	Mitigation Measure M-BR-1c: Protection Measures during Structure Demolition for Special-status Bats

Mitigation Measure HY-6 Mitigation Actions	GSR Project Mitigation Measures Applicable to secondary impacts M-HY-6 Mitigation Actions
	Mitigation Measure M-BR-4a: Identify Protected Trees Mitigation Measure M-BR-4b: Protected Tree Replacement Mitigation Measure M-GE-3: Conduct Site-Specific Geotechnical Investigations and Implement Recommendations Mitigation Measure M-HY-1: Develop and Implement a Storm Water Pollution Prevention Plan (SWPPP) or an Erosion and Sediment Control Plan Mitigation Measure M-HZ-2a: Preconstruction Hazardous Materials Assessment Mitigation Measure M-HZ-2b: Health and Safety Plan Mitigation Measure M-HZ-2c: Hazardous Materials Management Plan
Mitigation Action #6: Lower Pump in Irrigation Well	Mitigation Measure M-AE-1a: Site Maintenance Mitigation Measure M-TR-1: Traffic Control Plan Mitigation Measure M-HY-1: Develop and Implement a Storm Water Pollution Prevention Plan (SWPPP) or an Erosion and Sediment Control Plan
Mitigation Action #7: Lower And Change Pump in Irrigation Well	Mitigation Measure M-AE-1a: Site Maintenance Mitigation Measure M-TR-1: Traffic Control Plan Mitigation Measure M-GE-3: Conduct Site-Specific Geotechnical Investigations and Implement Recommendations Mitigation Measure M-HY-1: Develop and Implement a Storm Water Pollution Prevention Plan (SWPPP) or an Erosion and Sediment Control Plan
Mitigation Action #8: Add Storage Capacity for Irrigation Supply	Mitigation Measure M-AE-1a: Site Maintenance Mitigation Measure M-AE-3a: Implement Landscape Screening Mitigation Measure M-CR-2: Discovery of Archaeological Resources Mitigation Measure M-CR-3: Suspend Construction Work if a Paleontological Resource is Identified Mitigation Measure M-CR-4: Accidental Discovery of Human Remains Mitigation Measure M-TR-1: Traffic Control Plan Mitigation Measure M-NO-1: Noise Control Plan

Mitigation Measure HY-6 Mitigation Actions	GSR Project Mitigation Measures Applicable to secondary impacts M-HY-6 Mitigation Actions
	Mitigation Measure M-AQ-2a: BAAQMD Basic Construction Measures Mitigation Measure M-UT-4: Waste Management Plan Mitigation Measure M-UT-1a: Confirm Utility Line Information Mitigation Measure M-UT-1b: Safeguard Employees from Potential Accidents Related to Underground Utilities Mitigation Measure M-UT-1c: Notify Local Fire Departments Mitigation Measure M-UT-1d: Emergency Response Plan Mitigation Measure M-UT-1e: Advance Notification Mitigation Measure M-UT-1f: Protection of Other Utilities during Construction Mitigation Measure M-UT-1g: Ensure Prompt Reconnection of Utilities Mitigation Measure M-UT-1h: Avoidance of Utilities Constructed or Modified by Other SFPUC Projects Mitigation Measure M-UT-1i: Coordinate Final Construction Plans with Affected Utilities Mitigation Measure M-BR-1a: Protection Measures during Construction for Special status Birds and Migratory Passerines and Raptors Mitigation Measure M-BR-1b: Protection Measures for Special-status Bats during Tree Removal or Trimming
Mitigation Action #8: Add Storage Capacity for Irrigation Supply (continued)	Mitigation Measure M-BR-1c: Protection Measures during Structure Demolition for Special-status Bats Mitigation Measure M-BR-4a: Identify Protected Trees Mitigation Measure M-BR-4b: Protected Tree Replacement Mitigation Measure M-HY-1: Develop and Implement a Storm Water Pollution Prevention Plan (SWPPP) or an Erosion and Sediment Control Plan Mitigation Measure M-HZ-2a: Preconstruction Hazardous Materials Assessment Mitigation Measure M-HZ-2b: Health and Safety Plan Mitigation Measure M-HZ-2c: Hazardous Materials Management Plan

Mitigation Measure HY-6 Mitigation Actions	GSR Project Mitigation Measures Applicable to secondary impacts M-HY-6 Mitigation Actions
Mitigation Action #9: Replace Irrigation Well	Mitigation Measure M-AE-1a: Site Maintenance
	Mitigation Measure M-AE-3a: Implement Landscape Screening
	Mitigation Measure M-CR-2: Discovery of Archaeological Resources
	Mitigation Measure M-CR-3: Suspend Construction Work if a Paleontological Resource is Identified
	Mitigation Measure M-CR-4: Accidental Discovery of Human Remains
	Mitigation Measure M-TR-1: Traffic Control Plan
	Mitigation Measure M-NO-1: Noise Control Plan
	Mitigation Measure M-AQ-2a: BAAQMD Basic Construction Measures
	Mitigation Measure M-UT-4: Waste Management Plan
	Mitigation Measure M-UT-1a: Confirm Utility Line Information
	Mitigation Measure M-UT-1b: Safeguard Employees from Potential Accidents Related to Underground Utilities
	Mitigation Measure M-UT-1c: Notify Local Fire Departments
	Mitigation Measure M-UT-1d: Emergency Response Plan
	Mitigation Measure M-UT-1e: Advance Notification
	Mitigation Action #9: Replace Irrigation Well (continued)
Mitigation Measure M-UT-1g: Ensure Prompt Reconnection of Utilities	
Mitigation Measure M-UT-1h: Avoidance of Utilities Constructed or Modified by Other SFPUC Projects	
Mitigation Measure M-UT-1i: Coordinate Final Construction Plans with Affected Utilities	
Mitigation Measure M-BR-1a: Protection Measures during Construction for Special status Birds and Migratory Passerines and Raptors	
Mitigation Measure M-BR-1b: Protection Measures for Special-status Bats during Tree Removal or Trimming	
Mitigation Measure M-BR-1c: Protection Measures during Structure Demolition for Special-status Bats	
Mitigation Measure M-BR-4a: Identify Protected Trees	

<p>Mitigation Measure HY-6 Mitigation Actions</p>	<p>GSR Project Mitigation Measures Applicable to secondary impacts M-HY-6 Mitigation Actions</p>
	<p>Mitigation Measure M-BR-4b: Protected Tree Replacement</p>
	<p>Mitigation Measure M-HY-1: Develop and Implement a Storm Water Pollution Prevention Plan (SWPPP) or an Erosion and Sediment Control Plan</p>
	<p>Mitigation Measure M-HZ-2a: Preconstruction Hazardous Materials Assessment</p>
	<p>Mitigation Measure M-HZ-2b: Health and Safety Plan</p>
	<p>Mitigation Measure M-HZ-2c: Hazardous Materials Management Plan</p>



SAN FRANCISCO PLANNING DEPARTMENT

Planning Commission Draft Motion

GENERAL PLAN REFERRAL

HEARING DATE AUGUST 7, 2014

1650 Mission St.
Suite 400
San Francisco,
CA 94103-2479

Reception:
415.558.6378

Fax:
415.558.6409

Planning
Information:
415.558.6377

Date: July 31, 2014
Case No. **Case No. 2008.1396R**
Project Name **For SFPUC Regional Groundwater Storage and Recovery Project**
Zoning: N/A; Various locations, San Francisco Peninsula
Block/Lot No.: N/A; Various locations; San Francisco Peninsula. See attachment for individual locations.
Project Sponsor: San Francisco Public Utilities Commission
Greg Bartow
525 Golden Gate Ave., 10th Floor
San Francisco, CA 94102

Staff Contact: Paolo Ikezoe – (415) 575-9137
Paolo.Ikezoe@sfgov.org

ADOPTING FINDINGS OF CONSISTENCY WITH THE GENERAL PLAN AND WITH THE PRIORITY POLICIES OF PLANNING CODE SECTION 101.1 FOR THE PROPOSED SFPUC REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT AND FINDINGS UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

WHEREAS, Section 4.105 of the City Charter and Section 2A.53 of the Administrative Code require General Plan referrals to the Planning Commission (hereinafter “Commission”) for certain matters, including determination as to whether the lease or sale of public property, the vacation, sale or change in the use of any public way, transportation route, ground, open space, building, or structure owned by the City and County, would be in conformity with the General Plan prior to consideration by the Board of Supervisors.

On April 23, 2013, the San Francisco Public Utilities Commission (“Project Sponsor” or “SFPUC”) submitted an application to the Planning Department requesting a determination of consistency with the General Plan for the proposed acquisition of various property and easements in conjunction with the implementation of the SFPUC’s Regional Groundwater Storage and Recovery Project (“GSR Project”), a part of the Water System Improvement Program (“WSIP”).

PROJECT DESCRIPTION

The SFPUC is proposing the GSR Project as part of the WSIP, which the SFPUC approved in 2008 to provide a long-term plan for management of its regional water supply system. The primary goal of the Project is to provide additional dry-year water supply. The specific objectives of the Project are:

- Conjunctively manage the South Westside Groundwater Basin through the coordinated use of SFPUC surface water and groundwater pumped by its Partner Agencies.
- Provide supplemental SFPUC surface water to the Partner Agencies in normal and wet years, with a corresponding reduction of groundwater pumping by these agencies, which then allows for in-lieu recharge of the South Westside Groundwater Basin.
- Increase the dry-year and emergency pumping capacity of the South Westside Groundwater Basin by an average annual 7.2 million gallons per day (“mgd”).
- Provide a new dry-year groundwater supply for the SFPUC’s customers and increase water supply reliability during the 8.5-year design drought cycle.

The Project is a groundwater storage and recovery project located in northern San Mateo County that the SFPUC proposes to operate in conjunction with Daly City, San Bruno and CalWater (referred to as the “Partner Agencies”). The SFPUC supplies surface water to the Partner Agencies from its Regional Water System. The Partner Agencies currently supply potable water to their retail customers through a combination of groundwater from the southern portion of the Westside Groundwater Basin (referred to as the “South Westside Groundwater Basin”) and purchased SFPUC surface water. Under the Project, SFPUC would provide supplemental SFPUC surface water to the Partner Agencies during normal and wet years and in turn the Partner Agencies would reduce their groundwater pumping for the purpose of allowing the amount of groundwater in the South Westside Groundwater Basin to recharge. Then, during dry years, the Partner Agencies and the SFPUC would pump the increased stored groundwater using 16 new well facilities. The dry-year groundwater supply would be blended with water from the SFPUC’s regional water system and would as a result increase the available water supply to all regional water system customers during dry years.

The project consists of operation of up to 16 new groundwater well facilities within the South Westside Groundwater Basin to withdraw up to 7.2 mgd of stored groundwater during dry years and emergencies. Each groundwater well facility site would contain a well pump station, underground distribution piping, and above or underground utility connections. Most well facilities would have disinfection units as required.

The SFPUC proposes to install the 16 new groundwater wells along the SFPUC Regional Water System, at various locations throughout the San Francisco Peninsula in San Mateo County. The sites would have permanent wells installed and would require temporary construction easements and staging areas, temporary and permanent access roads, permanent pipeline easements and permanent utility easements.

The GSR Project is designed to further the use of the South Westside Groundwater Basin as an underground storage reservoir by storing water in the basin during wet periods for subsequent recapture during the dry period. This new dry-year water supply would be made available to the SFPUC’s regional water system to benefit all of the SFPUC wholesale and retail water customers.

In addition, the Project is part of the SFPUC’s WSIP adopted by the SFPUC on October 30, 2008. The WSIP consists of over 70 local and regional facility improvement projects that would increase the ability of the SFPUC’s water supply system to withstand major seismic events and prolonged droughts and to

meet estimated water-purchase requests in the service area. With the exception of the water supply goal, the overall WSIP goals and objectives are based on a planning horizon through 2030. The water supply goal to meet delivery needs in the SFPUC service area is based on a planning horizon through 2018. The overall goals of the WSIP for the regional water system are to:

- Maintain high-quality water.
- Reduce vulnerability to earthquakes.
- Increase water delivery reliability.
- Meet customer water supply needs.
- Enhance sustainability.
- Achieve a cost-effective, fully operational system.

The Project would help meet WSIP goals by increasing dry year water supply and helping to meet customer water supply needs. In addition, the Project would provide potable groundwater for emergency supply in the event that an earthquake or other major catastrophe interrupts the delivery of water from the regional water system.

ENVIRONMENTAL REVIEW

On April 10, 2013, the Department published the Draft Environmental Impact Report (“DEIR”) and provided public notice in a newspaper of general circulation of the availability of the DEIR for public review and comment for a 45-day period (the public review period was extended for two weeks, concluding on June 11, 2013, resulting in a 62-day public review period), and of the date and time of the Planning Commission public hearing on the DEIR; this notice was mailed to the Department’s list of persons requesting such notice and other interested parties, posted near the Project site, and made available at the main public library in San Francisco and at public libraries in San Mateo County. Additional notices of availability were distributed and published on May 29, 2013, to announce the extended public review period.

On April 10, 2013, copies of the DEIR were mailed or otherwise delivered to a list of persons requesting it, to those noted on the distribution list in the DEIR, to adjacent property owners, and to government agencies, the latter both directly and through the State Clearinghouse. The DEIR was posted on the Department’s website. A Notice of Completion was filed with the State Secretary of Resources via the State Clearinghouse on April 10, 2013.

The Planning Commission held a duly-advertised public hearing on the DEIR to accept written or oral comments on May 16, 2013. The Planning Department also held a local public hearing in the project vicinity in San Mateo County on May 14, 2013. The public hearing transcripts are in the Project record. The extended period for acceptance of written comments ended on June 11, 2013.

The Department prepared responses to comments on environmental issues received at the public hearing and in writing during the extended 62 day public review period for the DEIR, prepared revisions to the text of the DEIR in response to comments received or based on additional information that became available during the public review period. The Department provided additional, updated information

and clarification on issues raised by commenters, as well as SFPUC and the Planning Department, to address Project updates since publication of the DEIR. This material was presented in a Responses to Comments document (“RTC”), published on July 9, 2014, distributed to the Commission on July 10, 2014, and all parties who commented on the DEIR, and made available to others upon request at the Department and on the Department’s website.

On August 7, 2014, the Planning Commission (hereinafter “Commission”) conducted a public hearing on the Final Environmental Impact Report (EIR) for the Project, consisting of the Draft Environmental Impact Report, the RTC, and any additional consultations, comments and information received during the review process. The Commission reviewed and considered the Final EIR and found the contents of said report and the procedures through which the EIR was prepared, publicized and reviewed complied with the California Environmental Quality Act (Public Resources Code section 21000 *et seq.*) (“CEQA”), the CEQA Guidelines (14 Cal. Code Reg. section 15000 *et seq.*), and Chapter 31 of the San Francisco Administrative Code.

On August 7, 2014, the Commission certified the Final EIR by Motion No. XXXXX. Additionally, the Commission adopted approval findings, including findings rejecting alternatives, amending a mitigation measure, and making a statement of overriding considerations, and adopted a mitigation monitoring and reporting program (“MMRP”) pursuant to CEQA by Motion No. XXXXX, which findings and MMRP are incorporated by this reference as though fully set forth herein.

GENERAL PLAN COMPLIANCE AND BASIS FOR RECOMMENDATION

The Project is consistent with the Eight Priority Policies of Planning Code Section 101.1 as described in the body of this letter and is, on balance, **in-conformity** with the following Objectives and Policies of the General Plan. Comments are provided in *italic* text.

ENVIRONMENTAL PROTECTION ELEMENT

OBJECTIVE 2

IMPLEMENT BROAD AND EFFECTIVE MANAGEMENT OF NATURAL RESOURCES.

POLICY 2.1

Coordinate regional and local management of natural resources.

Comment: The SFPUC is entering into the GSR project with its Partner Agencies, Daly City, San Bruno and CalWater to make efficient use of the South Westside Groundwater Basin. Under the Project, the SFPUC would provide surface water to its Partner Agencies in wet and normal years, allowing for in-lieu storage of groundwater. In dry years, the SFPUC and Partner Agencies would be able to pump increased groundwater supply. The GSR project, located outside of the City and County of San Francisco in San Mateo County, would make the dry-year water supply it creates available to the cities in which the wells would be located - Daly City, San Bruno and South San Francisco – as well as to SFPUC wholesale water customers.

OBJECTIVE 5

ASSURE A PERMANENT AND ADEQUATE SUPPLY OF FRESH WATER TO MEET THE PRESENT AND FUTURE NEEDS OF SAN FRANCISCO.

Hetch Hetchy and the Water Department should continue their excellent planning program to assure that the water supply will adequately meet foreseeable consumption demands. To this end, the City should be prepared to undertake the necessary improvements and add to the Hetch Hetchy/Water Department system in order to guarantee the permanent supply. Furthermore, San Francisco should continually renew its commitments for the sale of water to suburban areas in planning how to meet future demand.

Comment: The GSR project is a key component of the SFPUC's WSIP plan for dry year supply. The GSR project would improve the SFPUC's ability to provide an adequate, reliable supply of water in both wet and dry years, by creating the capacity to collect and store groundwater. Water collected during wet periods would be used to supplement existing sources during dry years.

POLICY 5.3

Ensure water purity.

San Francisco's drinking water must meet State and Federal water quality standards. Ensuring water quality means continuing the present water purification process and monitoring storage facilities and transmission lines for threats to the water supply.

Comment: New well facilities constructed as part of the GSR project would have disinfection units as required. The Final EIR determines that the Project would have no significant impact on water quality and would not degrade drinking water.

OBJECTIVE 6

CONSERVE AND PROTECT THE FRESH WATER RESOURCE.

The fresh water resource, like all natural resources, is finite and measurable. While San Francisco's water supply seems vast in relation to current demands, it should not be wasted. Supplementary sources should also be investigated.

Comment: The GSR project would provide new supplementary sources of fresh water, collecting and storing groundwater during wet periods for use during dry years.

PROPOSITION M FINDINGS – PLANNING CODE SECTION 101.1

Planning Code Section 101.1 establishes Eight Priority Policies and requires review of discretionary approvals and permits for consistency with said policies. The Project is found to be consistent with the Eight Priority Policies as set forth in Planning Code Section 101.1 for the following reasons:

Eight Priority Policies Findings

The subject project is found to be consistent with the Eight Priority Policies of Planning Code Section 101.1 in that:

1. That existing neighborhood-serving retail uses be preserved and enhanced and future opportunities for resident employment in and ownership of such businesses enhanced.

The Project would have no adverse effect on neighborhood serving retail uses or opportunities for employment in or ownership of such businesses.

2. That existing housing and neighborhood character be conserved and protected in order to preserve the cultural and economic diversity of our neighborhood.

The Project would have no adverse effect on the City's housing stock or on neighborhood character. The existing housing and neighborhood character will not be negatively affected.

3. That the City's supply of affordable housing be preserved and enhanced.

The Project would have no adverse effect on the City's supply of affordable housing.

4. That commuter traffic not impede MUNI transit service or overburden our streets or neighborhood parking.

The Project would not result in commuter traffic impeding MUNI's transit service, overburdening the streets or altering current neighborhood parking.

5. That a diverse economic base be maintained by protecting our industrial and service sectors from displacement due to commercial office development, and that future opportunities for residential employment and ownership in these sectors be enhanced.

The Project would not affect the existing economic base in this area.

6. That the City achieve the greatest possible preparedness to protect against injury and loss of life in an earthquake.

The Project would not adversely affect achieving the greatest possible preparedness against injury and loss of life in an earthquake.

7. That landmarks and historic buildings be preserved.

The project does not involve alteration of any historic buildings.

8. That our parks and open space and their access to sunlight and vistas be protected from development.

The Project would have no long-term adverse effect on parks and open space or their access to sunlight and vista. The Final EIR determines that short-term impacts to the recreational experience during project construction would be mitigated to a less-than-significant level with the implementation of mitigation measures.

DECISION

That based upon the Record, the submissions of the SFPUC, the Department and SFPUC staff, and other interested parties, the oral testimony presented to this Commission at the public hearings, and all other written materials submitted by all parties, the Commission hereby **APPROVES** the General Plan Referral, finding the project, on balance, consistent with the General Plan.

I hereby certify that the Planning Commission ADOPTED the foregoing Motion on August 7, 2014.

Jonas P. Ionin
Commission Secretary

AYES:

NAYES:

ABSENT:

ADOPTED:

Attachments: Map of proposed well sites and list of right-of-way requirements

I:\Citywide\General Plan\General Plan Referrals\2014\2008.1396R PUC Groundwater Storage and Recovery.docx

List of right-of-way requirements

In compliance with Government Code Section 7260 et seq., undertake the process for possible acquisition, for an estimated combined purchase price not to exceed \$1,000,000, of interests (temporary or permanent) in real property located in San Mateo County, as follows:

- (1) Assessor's Parcel # 002-410-050 in Daly City, owned by Lake Merced Golf and Country Club
- (2) Assessor's Parcel's # 002-072-240, -250 and 002-201-650 in Daly City, owned by John Daly Boulevard Associates/West Lake Associates
- (3) Assessor's Parcel #'s 006-111-540 and 006-111-460 in Daly City, owned by Jefferson Elementary School District
- (4) Assessor's Parcel # 008-421-120 in Colma, owned by TSE Serramonte L.P. and leased by Kohl's Department Stores
- (5) Assessor's Parcel's (unknown) for property owned by BART/SAMTRANS in South San Francisco
- (6) Assessor's Parcel # 010-212-100 in South San Francisco, owned by Costco Wholesale Corporation
- (7) Assessor's Parcel # 093-331-080 in South San Francisco, owned by the City of South San Francisco
- (8) Assessor's Parcel # 010-292-210 in South San Francisco, owned by Kaiser Foundation Hospitals
- (9) Assessor's Parcel # 093-220-010 in Millbrae, owned by the SFPUC and leased by OSH/Lowes Corporation
- (10) Assessor's Parcel # 014-320-010 in San Bruno, owned by the U.S. Department of Veterans Affairs

