

Attachment A

Regional Groundwater Storage and Recovery Project

California Environmental Quality Act Findings: Findings of Fact, Evaluation of Mitigation Measures and Alternatives, and Statement of Overriding Considerations

San Francisco Public Utilities Commission

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 Public Utilities Commission ("SFPUC" 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 **Attachment B to Resolution No. _____**. The MMRP is required by CEQA Section 21081.6 and CEQA Guidelines Section 15091. Attachment B 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. Attachment B 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 Attachment B.

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 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 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 this Commission 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 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 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 the 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 prepared a Program EIR (“PEIR”), which was certified by the San Francisco Planning Commission 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 San Francisco Planning Department, as lead agency, prepared a Notice of Preparation (“NOP”) and conducted a scoping meeting for the GSR Project EIR. The San Francisco 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 San Francisco 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 San Francisco 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 San Francisco 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. This Commission concurs in that determination.

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 decisions 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, and background documentation for the Final EIR 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 approval of the Project and 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 SFPUC 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 SFPUC 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 SFPUC 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 SFPUC 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

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 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 5.8.3.5, 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

- **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 SFPUC, which the SFPUC 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 **Attachment B, the MMRP**. Attachment B identifies the SFPUC as the agency responsible for the implementation of all mitigation measures and establishes monitoring actions and a monitoring schedule.

This Commission recognizes that some of the mitigation measures as explained below are partially within the jurisdiction of other agencies, 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; SamTrans; and the San Francisco Planning Department. The San Francisco Planning Department already has approved the Project and adopted 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 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 Commission adopts all of the mitigation measures proposed for the Project. 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 **Attachment B**, 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. **Attachment B**, 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 SFPUC 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 SFPUC 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 SFPUC 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 Attachment B.

The SFPUC 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 SFPUC 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 SFPUC 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 SFPUC 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 SFPUC 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 **Attachment B**, 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*. **Attachment B**, 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 an 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 mitigate 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 SFPUC 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 SFPUC 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 SFPUC 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 SFPUC 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.