ATTACHMENT A

SUNOL VALLEY WATER TREATMENT PLANT EXPANSION AND TREATED WATER RESERVOIR

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 Sunol Valley Water Treatment Plant Expansion and Treated Water Reservoir Project ("Project") described in Section I, Project Description below, the San Francisco Public Utilities Commission ("SFPUC") 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 Administration 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, 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 the 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 its 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"), which together comprise 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 SFPUC adopts and implements the Project identified in the Final EIR to construct and operate a new treated water reservoir and water treatment facilities adjacent to the existing Sunol Valley Water Treatment Plant ("SVWTP") in an unincorporated Alameda County in the Sunol Valley. The Project is located adjacent to the existing SVWTP in unincorporated Alameda County in the Sunol Valley. The SVWTP primarily treats water from the Calaveras and San Antonio Reservoirs and, when needed, Hetch Hetchy water can be diverted to the SVWTP for treatment.

The SFPUC is has been ordered by the California Department of Public Health ("CDPH") (Order 02-04-96C-001) to provide additional treated water storage at the SVWTP to serve as a balancing reservoir. (See Appendix B of the Draft EIR). The Project therefore proposes to install a new 17.5-million-gallon treated water reservoir adjacent to the existing facilities. Additionally, the Project would construct various new facilities to increase the sustainable treatment capacity at the SVWTP from 120 million gallons per day ("mgd") to 160 mgd (the hydraulic capacity of the SVWTP) for 60 days. The Project would not increase the total volume of water that could be treated and served to the public; it would only increase redundancy and thereby operation flexibility to ensure that, when scenarios require treating 160 mgd, that water will meet regulatory requirements.

Key features of the proposed Project include:

- 78-inch-diameter discharge pipe to connect to the new treated water reservoir to the existing SVWTP discharge pipeline that connects to the Regional Transmission System;
- 17.5-million-gallon treated water reservoir;
- 3.5-million-gallon chlorine contact tank;
- Water treatment chemical storage and feed systems;
- Flocculation and sedimentation basin;
- Wash water recovery basin and piping;
- 2,000-kilowatt diesel generator and a new 8,000-gallon diesel fuel storage tank;
- Miscellaneous piping, valves, and mechanical and electrical work; and
- Spoils disposal and conversion of an existing nursery to grassland habitat.

B. Project Objectives

The Project objectives are to:

- Comply with the CDPH Compliance Order to provide treated water storage to serve as a buffer for potential treatment failures at the SVWTP;
- Add redundant facilities at the SVWTP to improve treatment reliability by increasing the plant's "sustainable capacity" to 160 mgd, defined as the ability to treat 160 mgd for at least 60 days with the largest piece of equipment or process component (e.g., flocculation and sedimentation basin) out of service for maintenance (overall hydraulic peak capacity at the plant would remain 160 mgd);
- Provide ability to reliably augment water supply with as much as 160 mgd of water from the Alameda Creek watershed during unplanned outages of the Hetch Hetchy supply; and
- Provide ability to sustainably treat as much as 160 mgd of Hetch Hetchy water at the SVWTP during an unplanned Hetch Hetchy water quality event.[1]

In addition, the proposed Project is part of the SFPUC's Water System Improvement Program ("WSIP") adopted by this Commission on October 30, 2008 by its Resolution No. 08-0200. 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 through the year 2018. The regional water system consists of water conveyance, treatment, and distribution facilities, and delivers water to retail and wholesale customers. The Project also serves to meet several of the WSIP goals and objectives for the overall regional water system by helping to (1) improve seismic reliability by constructing new facilities with modern earthquake engineering methods; (2) improve delivery reliability under a variety of operating conditions by improving overall operations of the system through additional redundancy; and (3) improve water quality reliability under a variety of operation conditions through providing additional treated water storage and operational flexibility.

C. Environmental Review

1. Water System Improvement Program Environmental Impact Report

On October 30, 2008, the SFPUC adopted the regional Water System Improvement Program (the "WSIP") (originally identified as the "Phased WSIP Variant"). The WSIP will improve the regional system with respect to water quality, seismic response, water delivery and water supply to meet water delivery needs in the service area through the year 2018 and establish level of service goals and system performance criteria. The program includes a water supply strategy and modifications to system operations, and construction of a series of facility improvement

[1] Water from the SVWTP system is conveyed to the Hetch Hetchy system through a 78-inch pipeline that parallels Calaveras Road. Periodically, however, the Hetch Hetchy facilities are out of service for maintenance. During these periods the SVWTP must treat local water to compensate for the loss of Hetch Hetchy supply. There are also relatively short periods when the Hetch Hetchy supply is available but does not comply with drinking water standards for turbidity, usually due to rate changes or pH failures at the Rock River Lime Station or disinfection failures at the Tesla Portal, but also possibly due to unusually high levels of sediment carried by stormwater runoff following a fire on watershed lands, flooding, or other such extraordinary events.

projects spanning seven counties, including Tuolumne, Stanislaus, San Joaquin, Alameda, Santa Clara, San Mateo and San Francisco. The Project, one of the facility improvement projects adopted as part of the Phased WSIP Variant, is within the Sunol Valley Region of the WSIP and is located in Alameda County.

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 Project.

2. Sunol Valley Water Treatment Plant Environmental Impact Report

Pursuant to and in accordance with the requirements of Section 21094 of the Public Resources Code and Section 15152 of the CEQA Guidelines, the Final EIR prepared for the Project described below, tiers from the PEIR and incorporates by reference the relevant analyses of the PEIR with respect to the WSIP's impacts and mitigation measures. The Final EIR summarizes and incorporates by reference the PEIR's analysis of the impacts associated with the WSIP's water supply strategy, including the PEIR analysis and conclusions regarding impacts on the SFPUC's watersheds and growth inducement impacts. The Project was fully analyzed and considered in sufficient detail in the PEIR's analysis of water supply and growth inducement impacts.

In accordance with Sections 15063 and 15082 of the CEQA Guidelines, the San Francisco Planning Department, as lead agency, released a Notice of Preparation ("NOP") on August 3, 2007 and held a public scoping meeting on August 22, 2007, in Sunol, California. (See Appendix A of the Draft EIR.)

The NOP was distributed to the State Clearinghouse and mailed to: governmental agencies with potential interest, expertise, and/or authority over the project; interested members of the public; and occupants and owners of real property surrounding the project area. The scoping meeting was held at the Sunol Glen Elementary School at 11601 Main Street in Sunol, California, and six people attended. The purpose of the scoping meeting was to present the project description and receive oral comments regarding the scope of the Draft EIR for the proposed project.

MEA received comments between August 3 and September 18, 2007, on the NOP. In addition to comments received during the scoping meeting, the San Francisco Planning Department received written comments in the form of letters or emails. The comment inventory is included in Appendix A of the Draft EIR. Comments received addressed environmental issues such as aesthetics, biological resources, hazardous materials, hydrology and water quality, and recreation impacts. Comments also addressed project description and CEQA alternatives.

The San Francisco Planning Department then prepared the Draft EIR, which describes the Project and the environmental setting, identifies potential impacts, presents mitigation measures for impacts found to be significant or potentially significant, and evaluates Project Alternatives.

The Draft EIR analyzes the impacts associated with each of the key components of the Project, and identifies mitigation measures applicable to reduce impacts found to be significant or potentially significant for each of those key components. It also includes an analysis of four alternatives to the Project. In assessing construction and operational impacts of the Project, the EIR considers the impact of the Project and the cumulative impacts associated with the proposed Project in combination with other past, present, and future actions with potential for impacts on the same resources.

Each environmental issue presented in the Draft EIR is analyzed with respect to significance criteria that are based on the San Francisco Planning Department Major Environmental Analysis Division ("MEA") guidance regarding the environmental effects to be considered significant. MEA 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 June 3, 2009 for a 45-day public review period, which closed on July 17, 2009. Public hearings on the Draft EIR to accept written or oral comments were held in Sunol on June 30, 2009 and in San Francisco on July 9, 2009. During the public review period, the San Francisco Planning Department received written comments sent through the mail, fax, or email. No comments were received at the San Francisco public hearing. A court reporter was present at each of the public hearings, transcribed the oral comments verbatim, and prepared written transcripts.

The San Francisco Planning Department then prepared the Comments and Responses ("C&R") document, which provides written response to each comment received on the Draft EIR. The C&R was published on November 18, 2009 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. 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, aesthetics, traffic, hydrology and water quality, biological resources, and mitigation measures. In certifying the Final EIR, the Planning Commission determined that the Final EIR does not add significant new information to the Draft EIR that would require recirculation of the EIR under CEQA because 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 Final EIR fully analyzed the Project proposed for approval herein. No new impacts have been identified that have not been analyzed in the Final EIR.

D. Approval Actions

1. Planning Commission Actions

On December 3, 2009, the Planning Commission certified the Final EIR.

2. Public Utilities Commission Actions

The San Francisco Public Utilities Commission is taking the following actions and approvals to implement the Project:

- Adopt these CEQA findings and the attached Mitigation Monitoring and Reporting Program.
- Approve the Project, as described herein.

3. San Francisco Board of Supervisors Actions

- The Planning Commission's certification of the Final EIR may be appealed to the Board of Supervisors. If appealed, the Board of Supervisors will determine whether to uphold the certification or to remand the Final EIR to the Planning Department for further review.

- The San Francisco Board of Supervisors approves an allocation of bond monies to pay for implementation of the Project.

4. Other—Federal, State, and Local Agencies

Implementation of the Project mitigation measures will involve consultation with or required approvals by other local, state and federal regulatory agencies, including, but not limited to, the following:

- U.S. Army Corps of Engineers
- U.S. Fish & Wildlife Service
- State Historic Preservation Officer
- Cal/OSHA
- California Department of Fish and Game
- State Water Resources Control Board
- San Francisco Bay Regional Water Quality Control Board
- Various municipal public works departments

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. Findings About Significant Environmental Impacts And Mitigation Measures

The following Sections II, III and IV set forth the SFPUC'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 SFPUC regarding the environmental impacts of the Project and the mitigation measures included as part of the Final EIR and adopted by the SFPUC as part of the Project. To avoid duplication and redundancy, and because the SFPUC 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 herein and rely upon them as substantial evidence supporting these findings.

In making these findings, the SFPUC has considered the opinions of SFPUC staff and experts, other agencies and members of the public. The SFPUC finds that the determination of significance thresholds is a judgment decision within the discretion of the City and County of San Francisco; 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 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 SFPUC is not bound by the significance determinations in the EIR (see Pub. Resources Code, § 21082.2, subd (e)), the SFPUC 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 impacts and mitigation measures designed to address those impacts. In making these findings, the SFPUC 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 the 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 SFPUC 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. (Pub. Resources Code, § 21002; CEQA Guidelines, §§ 15126.4, subd. (a)(3), 15091.) Based on the evidence in the whole record of this proceeding, the SFPUC finds that implementation of the Project will not result in any significant impacts in the following areas and that these impact areas therefore do not require mitigation:

Plans and Policies

- Conflict with San Francisco plans and policies or other applicable land use plans and policies

Land Use

- Adverse impact on the existing land use character of the vicinity

Aesthetics

- Adverse effect on scenic vistas
- Degrade the existing visual character or quality of the site and its surroundings
- Result in a substantial new source of substantial light or glare

Population and Housing

- Induce substantial population growth due to an increase in employment opportunities

Transportation and Circulation

- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways
- Result in inadequate emergency access
- Increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system during operation

Noise and Vibration

- Expose persons to or generate excessive groundborne vibration
- Expose persons to or generate noise levels in excess of standards established in the Alameda County Noise Ordinance during operation
- Result in a substantial temporary, periodic, or permanent increase in ambient noise levels in the project vicinity above levels existing without the project during operation

Air Quality

- Conflict with or obstruct implementation of the applicable air quality plan
- Expose sensitive receptors to diesel particulate matter ("DPM") exceeding regulatory thresholds
- Create objectionable odors
- Conflict with the state goal of reducing greenhouse gas ("GHG") emissions in California to 1990 levels by 2020

- Operation emissions that would violate or contribute to an existing violation of air quality standards for emissions of ROG, NO_x, and PM_{10}

Utilities and Service Systems

- Generate solid waste that would exceed permitted landfill capacity

Public Services

- Increase demand for public services

Biological Resources

- Result in disturbance, injury or mortality of and substantial loss of foraging habitat for San Joaquin kit fox
- Adverse impacts on American badger
  Impact the movement of native resident or migratory fish or wildlife species or on established native resident or migratory wildlife corridors, or on the use of native wildlife nursery sites
- Impact California Red-Legged Frog, Foothill Yellow-Legged Frog and Western Pond Turtle due to operational discharges to Alameda Creek
- Impact resident trout/native fish due to operational discharges to Alameda Creek

Geology and Soils

- Expose construction personnel to risk of loss, injury, or death due to slope instability
- Expose the proposed facilities to substantial adverse effects due to surface fault rupture
- Expose the proposed facilities to adverse effects due to seismically induced ground shaking
- Expose the proposed facilities to adverse effects due to seismically induced ground failure, including liquefaction, landslides, and settlement
- Expose the proposed facilities to adverse effects due to slope instability
- Expose the proposed facilities to adverse effects due to location on geologic or soil units that may become unstable
- Expose the facilities to expansive or corrosive soils
- Result in a substantial change in the natural topography of the site

Hydrology and Water Quality

- Degradation of water quality due to operational discharges of treated water to surface waters
- Expose people or structures to a significant flooding hazard due to operation of the treated water reservoir
- Place spoils within the 100-year floodplain that would impede or redirect flood flows
- Deplete groundwater resources during operation

Hazards and Hazardous Materials

- Risk of loss, injury, or death as a result of fire during construction activities
- Result in substantial gassy conditions during tunnel excavation activities
- Release of hazardous materials during operation

Mineral and Energy Resources

- Result in the use of fuel, water, or energy in a wasteful manner
- Result in the substantial loss of availability of known mineral resources of importance to the region and the state

Cumulative Impacts

- Considerable contribution to a cumulative impact regarding consistency with plans and policies
- Considerable contribution to a cumulative impact on existing character of land uses in Sunol Valley
- Considerable contribution to a cumulative impact on views from Calaveras Road due to spoils placement
- Considerable contribution to a cumulative impact on aesthetic character due to new aboveground facilities
- Considerable contribution to a cumulative impact on population and housing
- Considerable contribution to a cumulative impact on historic resources
- Considerable contribution to a cumulative impact to degradation of Calaveras Road
- Considerable contribution to a cumulative impact to traffic on Interstate 680
- Considerable contribution to a cumulative impact on noise levels from construction traffic on Calaveras Road during the day
- Considerable contribution to a cumulative impact of DPM emissions
- Considerable contribution to a cumulative impact of greenhouse gas emissions
- Considerable contribution to a cumulative need for increased public services and associated effects
- Considerable contribution to a cumulative impact of increased geological hazards
- Considerable contribution to a cumulative impact on regional groundwater levels within the watershed
- Considerable contribution to a cumulative impact of increased flooding
- Considerable contribution to a cumulative impact of increased wildland fire hazard
- Considerable contribution to a cumulative impact of loss of mineral resources
- Considerable contribution to a cumulative impact of wasteful use of energy

III. FINDINGS OF POTENTIALLY 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 potential 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 can be implemented by the SFPUC. The mitigation measures proposed for adoption in this section are the same as the mitigation measures identified in the Final EIR for the Project. The full text of the mitigation measures is contained in the Final EIR and in Attachment B, the Mitigation Monitoring and Reporting Program. The Commission finds that the impacts identified in this section would be reduced to a less-than-significant level through the mitigation measures contained in the Final EIR and set forth in Attachment B.

This Commission recognizes that some of the mitigation measures are partially within the jurisdiction of other agencies, including the U.S. Fish and Wildlife Service, the California Department of Fish and Game, the Regional Water Quality Control Board, and the U.S. Army Corps of Engineers. The Commission urges these agencies to assist in implementing these mitigation measures, and finds that these agencies can and should participate in implementing these mitigation measures.

Impact AES-2: Project construction could damage scenic resources that contribute to a scenic public setting

The trees along Calaveras Road and on the hillsides west of Calaveras Road are scenic resources that contribute to a scenic public setting. Alameda Creek and associated vegetation is also a scenic resource that is intermittently visible from Calaveras Road due to intervening vegetation and topography and from elevated distant vantage points on the trails.

Construction would require removal of trees on portions of the hillside where new water treatment facilities would be installed. Removal of these trees would largely be screened by intervening topography and the trees along Calaveras Road and Alameda Creek, which would not be removed. Nevertheless, this would be a significant impact.

- *Mitigation Measure BIO-1d: Prepare and Implement a Vegetation Restoration and Compensation Plan*

Impact AES-6: Project operations could permanently damage scenic resources

The proposed new facilities, including the treated water reservoir, chlorine contact tank, and retaining wall would require removal of trees west of Calaveras Road that contribute to a scenic public setting. The area around the existing treatment plant is heavily wooded and existing vegetation and tree resources along Alameda Creek would largely screen views. Nevertheless, removal of trees would be significant impact.

- *Mitigation Measure BIO-1d: Prepare and Implement a Vegetation Restoration and Compensation Plan*

Impact CR-1: Project construction could result in impacts to paleontological resources

A substantial portion of the project site is situated immediately on alluvial and fluvial deposits of Pleistocene age, which are considered highly sensitive for paleontological resources. Subsurface excavation in these areas could result in disturbance or loss of paleontological resources. Additionally, if earthwork in areas of Holocene substrate is deep enough to involve underlying

Pleistocene strata, activities in such area could also result in disturbance or loss of paleontological resources. This would be a significant impact.

- *Mitigation Measure CR1-a: Conduct Preconstruction Surveys for Significant Paleontological Resources in Areas of Undetermined and High Paleontological Sensitivity*
- *Mitigation Measure CR1-b: Paleontological Resources Worker Awareness Training*
- *Mitigation Measure CR1-c: Perform Preconstruction Surface Salvage of Any Significant Paleontological Resources Discovered*
- *Mitigation Measure CR1-d: Conduct Paleontological Resources Monitoring during Construction in Areas of Undetermined and High Paleontological Sensitivity, as Required*
- *Mitigation Measure CR1-e: Stop Work if Known or Suspected Paleontological Resources Are Encountered*

Impact CR-2: Project construction could result in impacts on unknown or known pre-historic and historic-era archaeological resources

No known prehistoric or archaeological resources were identified through the investigation conducted to support the EIR. However, the soil types and geomorphological configuration of the Project area indicate that undiscovered prehistoric archaeological resources could be buried beneath the ground surface. Such resources could be discovered through subsurface construction activities. This would be a significant impact.

- *Mitigation Measure CR-2: Procedures to be Followed in the Event of an Accidental Discovery*

Impact CR-3: Project construction could potentially disturb buried human remains

Human remains have not been identified within the Project area through the records search, archaeological fieldwork, or consultation with the Native American Heritage Commission ("NAHC"). However, subsurface construction activities could inadvertently unearth and impact unknown (i.e., not yet recorded) human remains associated with unrecorded archaeological deposits. This would be a significant impact.

- *Mitigation Measure CR-3: Protection of Human Remains if Encountered during Excavation Activities*

Impact TRANS-1: Project construction could result in an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system

Project construction would generate vehicle and truck trips on a temporary basis, which would result in a temporary increase in traffic on the existing circulation system. Project construction would generate three kinds of traffic—truck trips associated with the materials and equipment delivery necessary for carrying out the proposed work, vehicle trips associated with workers employed on the site, and spoils hauling trips. Project traffic would affect existing level of service ("LOS") at the I-680 north bound ramp and Calaveras Road; however, these roadways would continue to operate at LOS D or above and would not exceed the operational threshold of LOS E established by the Alameda County Congestion Management Agency. However, if spoils

were hauled on Calaveras Road to the spoils site north of the SVWTP during peak hours, a significant impact on traffic could occur.

- *Mitigation Measure TRANS-1: Preparation and Implementation of Traffic Control Plan*

Impact TRANS-3: Project construction could substantially increase hazards due to a design feature or incompatible uses

Project delivery and hauling trucks would be large, travel at slow speeds, and have wider turning radii than automobiles, and, when turning in and out of the SVWTP access road, would present a hazard to existing vehicle traffic. The proposed Project would also present the potential for conflict between heavy trucks and bicyclists on Calaveras Road. Because of their small size when compared to large construction-related trucks, bicyclists can be particularly difficult to notice for truck drivers. Project construction may occur during weekends, and, therefore, hazards to recreational bicyclists would be heightened during the weekends. This would be a significant impact.

- *Mitigation Measure TRANS-1: Preparation and Implementation of Traffic Control Plan*

Impact NOI-1: Project construction could temporarily expose persons to or generate noise levels in excess of standards established in the Alameda County Noise Ordinance

Construction activities would result in temporary noise increases in the Project area. There are two sensitive receptors that could be affected: a private ranch residence (the Garcia Ranch) approximately 1.3 miles northwest of the SVWTP and 1,360 feet west of Calaveras Road and the SFPUC watershed keeper's house approximately 1.3 miles northeast of the SVWTP and 225 feet east of Calaveras Road. The noise analysis found that noise from pile driving alone and/or in addition to other construction activities would exceed the Alameda County Noise Ordinance during evening and nighttime hours. This would be a significant impact.

- *Mitigation Measure NOI-1: Implementation of Noise Controls*

Impact NOI-3: Project construction could generate a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project

For this EIR, a "substantial increase in ambient noise" would occur if Project noise levels exceed either the speech interference threshold of 70 dBA or the sleep disturbance threshold of 50 dBA. The noise analysis found that, even with pile driving, construction noise would not exceed the speech interference threshold. Construction activities, even without pile driving, would exceed the sleep disturbance threshold. This would be a significant impact.

- *Mitigation Measure NOI-1: Implementation of Noise Controls*

Impact AIR-2: Construction emissions of PM_{10}, $PM_{2.5}$, ROG, and NO_x could violate air quality standards

Construction of the SVWTP expansion, treated water reservoir, discharge pipeline, and spoils hauling and placement would generate fugitive dust[2] (including PM_{10} and $PM_{2.5}$) and other criteria pollutants as a result of construction activities, including excavation, grading, vehicle travel on paved and unpaved surfaces, and vehicle exhaust. Combustion emissions from construction equipment and vehicles (i.e., heavy equipment and delivery/haul trucks, and worker commute vehicles) would result in emissions of ROG and NO_x. Construction-related emissions could substantially increase localized concentrations of PM_{10} and affect PM_{10} compliance with ambient air quality standards on a regional basis. Criteria pollutant emissions of ROG and NO_x from these emission sources would incrementally add to regional atmospheric loading of ozone precursors during project construction. Particulate emissions from construction activities could also lead to adverse health effects and nuisance concerns (e.g., reduced visibility and soiling of exposed surfaces). This would be a significant impact.

- *Mitigation Measure AIR-2a: Implementation of Dust Control Plan*
- *Mitigation Measure AIR-2b: Implementation of BAAQMD Dust Control Measures*
- *Mitigation Measure AIR-2c: Implementation of BAAQMD Exhaust Control Measures*

Impact REC-1: Project construction could temporarily impact recreation use of Calaveras Road during project construction

During the approximately 3-year construction period, the temporary increase in traffic on Calaveras Road could affect access to the Sunol Regional Wilderness and Ohlone Regional Wilderness areas, operated by the East Bay Regional Parks District. In addition, Calaveras Road experiences considerable bicycle travel on the weekends and the East Bay Bicycle Coalition identifies Calaveras Road between I-680 and Milpitas as an on-road route recommended for bicycle travel. This would be a *significant* impact

- *Mitigation Measure TRANS-1: Preparation and Implementation of Traffic Control Plan*

Impact UTL-2: Temporary disruption to regional and local utilities

Construction activities could inadvertently conflict with regional and local utilities, including the SFPUC's existing underground water service pipelines and culverts extending under Calaveras Road into Nursery Sites 1 and 2 and the North Spoils site. The Project contractor would be required to comply with the California Occupational Safety and Health Administration Construction Safety Orders for excavation and trenching, and with the utility notification requirements under Article 2 of the California Government Code Section 4216 which would reduce the potential for temporary service disruptions. If service were disrupted, this would be a significant impact.

- *Mitigation Measure UTL-2: Avoid Conflicts with Existing Utilities and Coordinate Efforts with Affected Utilities*

[2] Fugitive emissions generally refer to those emissions that are released to the atmosphere by some means other than through a stack or tailpipe.

Impact BIO-1: Temporary and Permanent Loss of Suitable Habitat for and Potential Injury or Mortality of California Tiger Salamander

The Project could result in temporary adverse effects to California tiger salamander, including mortality and/or injury; disruption of migration or movement patterns; entrapment in excavated trenches if left open overnight; disturbance or disorientation due to noise, vibration, presence of human activity, and nighttime lighting; inadvertent release of hazardous materials that could degrade habitat and cause injury or mortality; and temporary loss of habitat. The Project would also result in permanent loss of upland habitat. This would be a significant impact.

- *Mitigation Measure BIO-1a: Conduct Mandatory Biological Resources Awareness Training for All Project Personnel*
- *Mitigation Measure BIO-1b: Install Wildlife Exclusion Fencing along the Perimeter of the Construction Work Area and Implement General Measures to Avoid Impacts to Special-Status Species and Sensitive Natural Communities*
- *Mitigation Measure BIO-1c: Conduct Pre-Construction Surveys and Monitor Construction Activities for California Tiger Salamander, California Red-Legged Frog, Western Pond Turtle, and Alameda Whipsnake*
- *Mitigation Measure BIO-1d: Prepare and Implement a Vegetation Restoration and Compensation Plan*
- *Mitigation Measure BIO-1e:* Compensate *for Permanent Loss of Upland Habitat for California Tiger Salamander, California Red-Legged Frog, and Alameda Whipsnake*
- *Mitigation Measure HYD-1a: Construction Water Quality Best Management Practices*

Impact BIO-2: Temporary and Permanent Loss of Suitable Habitat for and Potential Injury or Mortality of California Red-Legged Frog

The Project could result in temporary adverse effects to California red-legged frog, including mortality and/or injury; disruption of migration or movement patterns; entrapment in excavated trenches if left open overnight; disturbance or disorientation due to noise, vibration, presence of human activity, and nighttime lighting; inadvertent release of hazardous materials that could degrade habitat and cause injury or mortality; and loss of habitat. Erosion and sedimentation of Alameda Creek could adversely affect breeding and non-breeding aquatic California red-legged frog habitat in Alameda Creek. The Project would also result in permanent loss of upland habitat. This would be a significant impact.

- *Mitigation Measure BIO-1a: Conduct Mandatory Biological Resources Awareness Training for All Project Personnel*
- *Mitigation Measure BIO-1b: Install Wildlife Exclusion Fencing along the Perimeter of the Construction Work Area and Implement General Measures to Avoid Impacts to Special-Status Species and Sensitive Natural Communities*
- *Mitigation Measure BIO-1c: Conduct Pre-Construction Surveys and Monitor Construction Activities for California Tiger Salamander, California Red-Legged Frog, Western Pond Turtle, and Alameda Whipsnake*
- *Mitigation Measure BIO-1d: Prepare and Implement a Vegetation Restoration and Compensation Plan*
- *Mitigation Measure BIO-1e:* Compensate *for Permanent Loss of Upland Habitat for California Tiger Salamander, California Red-Legged Frog, and Alameda Whipsnake*
- *Mitigation Measure HYD-1a: Construction Water Quality Best Management Practices*
- *Mitigation Measure HYD-1b: Management of Dewatering Effluent Discharges*

Impact BIO-3: Potential Degradation of Suitable Habitat and Potential Injury or Mortality of Foothill Yellow-Legged Frog and Western Pond Turtle

The Project could result in temporary adverse effects to foothill yellow-legged frog and western pond turtle, including mortality and/or injury; disruption of migration or movement patterns; entrapment in excavated trenches if left open overnight; disturbance or disorientation due to noise, vibration, presence of human activity, and nighttime lighting; inadvertent release of hazardous materials that could degrade habitat and cause injury or mortality; and temporary loss of habitat. Erosion and sedimentation of Alameda Creek due to adjacent construction activities could adversely affect aquatic habitat in the creek. The Project would also result in permanent loss of upland habitat. This would be a significant impact.

- *Mitigation Measure BIO-1a: Conduct Mandatory Biological Resources Awareness Training for All Project Personnel*
- *Mitigation Measure BIO-1b: Install Wildlife Exclusion Fencing along the Perimeter of the Construction Work Area and Implement General Measures to Avoid Impacts to Special-Status Species and Sensitive Natural Communities*
- *Mitigation Measure BIO-1c: Conduct Pre-Construction Surveys and Monitor Construction Activities for California Tiger Salamander, California Red-Legged Frog, Western Pond Turtle, and Alameda Whipsnake*
- *Mitigation Measure BIO-1d: Prepare and Implement a Vegetation Restoration and Compensation Plan*
- *Mitigation Measure BIO-1e:* Compensate *for Permanent Loss of Upland Habitat for California Tiger Salamander, California Red-Legged Frog, and Alameda Whipsnake*
- *Mitigation Measure HYD-1a: Construction Water Quality Best Management Practices*
- *Mitigation Measure HYD-1b: Management of Dewatering Effluent Discharges*

Impact BIO-4: Temporary and Permanent Loss of Suitable Habitat for and Potential Injury or Mortality of Alameda Whipsnake

The Project could result in temporary adverse effects to Alameda whipsnake, including mortality and/or injury; disruption of migration or movement patterns; entrapment in excavated trenches if left open overnight; disturbance or disorientation due to noise, vibration, presence of human activity, and nighttime lighting; inadvertent release of hazardous materials that could degrade habitat and cause injury or mortality; and temporary loss of habitat. The Project would also result in permanent loss of upland habitat. This would be a significant impact.

- *Mitigation Measure BIO-1a: Conduct Mandatory Biological Resources Awareness Training for All Project Personnel*
- *Mitigation Measure BIO-1b: Install Wildlife Exclusion Fencing along the Perimeter of the Construction Work Area and Implement General Measures to Avoid Impacts to Special-Status Species and Sensitive Natural Communities*
- *Mitigation Measure BIO-1c: Conduct Pre-Construction Surveys and Monitor Construction Activities for California Tiger Salamander, California Red-Legged Frog, Western Pond Turtle, and Alameda Whipsnake*
- *Mitigation Measure BIO-1d: Prepare and Implement a Vegetation Restoration and Compensation Plan*
- *Mitigation Measure BIO-1e:* Compensate *for Permanent Loss of Upland Habitat for California Tiger Salamander, California Red-Legged Frog, and Alameda Whipsnake*

Impact BIO-5: Temporary and Permanent Loss of Suitable Habitat for and Potential Injury or Mortality of Western Burrowing Owl

The Project could result in temporary adverse effects to western burrowing owl, including mortality and/or injury; disturbance or disorientation due to noise, vibration, presence of human activity and nighttime lighting; inadvertent release of hazardous materials that could degrade habitat and cause injury or mortality; and temporary loss of habitat. The Project would also result in permanent loss of upland habitat. This would be a significant impact.

- *Mitigation Measure BIO-1a: Conduct Mandatory Biological Resources Awareness Training for All Project Personnel*
- *Mitigation Measure BIO-1d: Prepare and Implement a Vegetation Restoration and Compensation Plan*
- *Mitigation Measure BIO-5: Conduct Preconstruction Surveys for Active Burrowing Owl Burrows and Implement CDFG Guidelines for Burrowing Owl Mitigation, if Necessary*

Impact BIO-6: Loss of Suitable Nest Trees and Potential Disturbance, Injury or Mortality of Nesting Special-Status and other Migratory Birds

The Project could have an adverse effect on special-status or other migratory birds due to the loss of suitable nest tree. During construction the Project could result in injury, adult or juvenile mortality, loss of eggs, disruption of daily activities, nest destruction or abandonment, or loss of reproductive potential. Noise, dust, vibration, presence of human activity, and lighting during nighttime construction may disturb or disorient birds. Approximately 105 trees would be removed. This would be a significant impact.

- *Mitigation Measure BIO-1a: Conduct Mandatory Biological Resources Awareness Training for All Project Personnel*
- *Mitigation Measure BIO-6: Remove Trees and Shrubs during the Non-breeding Season (August 16–February 14) for Birds or Conduct Nesting Bird Surveys, and Establish No-Disturbance Buffers, as Appropriate*

Impact BIO-7: Potential Disturbance, Injury or Mortality of and Loss of Potential Roosting Habitat for Pallid Bat

The Project could have an adverse effect on pallid due to loss or disturbance of active roosts in trees in or adjacent to the project site through tree removal. Approximately 105 trees that could provide roosting habitat for pallid bats would be removed. This would be a significant impact.

- *Mitigation Measure BIO-1a: Conduct Mandatory Biological Resources Awareness Training for All Project Personnel*
- *Mitigation Measure BIO-7: Conduct Preconstruction Surveys for Sensitive Bats and Implement Avoidance and Minimization Measures if Found*

Impact BIO-10: Potential Disturbance, Injury, or Mortality of San Francisco Dusky-Footed Woodrat

Suitable habitat for San Francisco dusky-footed woodrat is located within the riparian forest/scrub along Alameda Creek. If woodrats and/or nests are present in this area, they could be disturbed, injured, or killed by construction activities. This would be a significant impact.

- *Mitigation Measure BIO-1a: Conduct Mandatory Biological Resources Awareness Training for All Project Personnel*
- *Mitigation Measure BIO-10: Conduct Pre-Construction Surveys for Dusky-footed Woodrat and Implement Avoidance and Minimization Measures if Found*

Impact BIO-11: Dewatering during project construction could result in impacts on resident trout/other native fish

The Project would not involve any work within the Alameda Creek channel. However, dewatering discharges of groundwater to Alameda Creek during installation of the proposed 78-inch pipeline under the creek and other adjacent activities could affect resident trout/other native fish if the water temperature substantially exceeds ambient temperatures. This would be a significant impact.

- *Mitigation Measure BIO -1a: Conduct Mandatory Biological Resources Awareness Training for All Project Personnel*
- *Mitigation Measure HYD-1a: Construction Water Quality Best Management Practices*
- *Mitigation Measure HYD-1b: Management of Dewatering Effluent Discharges*

Impact BIO-12: Temporary or permanent impacts on sensitive riparian and oak woodland natural communities

The Project would adversely effect two sensitive habitats: willow riparian forest/scrub and mixed oak woodlands. Stormwater runoff and watering for dust control could carry sediment and pollutants from areas disturbed during project construction to the willow riparian habitat, which could have detrimental effects, including disease or mortality. The Project would result in the temporary loss of 0.1 acres of willow riparian forest/scrub and up to 4.1 acres of mixed oak woodlands. No permanent impacts are anticipated in willow riparian forest/scrub. The Project would permanently displace approximately 0.6 acre of mixed oak woodland. This would be a significant impact.

- *Mitigation Measure BIO-1a: : Conduct Mandatory Biological Resources Awareness Training for All Project Personnel*
- *Mitigation Measure BIO-1b: Install Wildlife Exclusion Fencing along the Perimeter of the Construction Work Area and Implement General Measures to Avoid Impacts to Special-Status Species and Sensitive Natural Communities*
- *Mitigation Measure BIO-1d: Prepare and Implement a Vegetation Restoration and Compensation Plan*
- *Mitigation Measure HYD-1a: Construction Water Quality Best Management Practices*

Impact BIO-13: Temporary and permanent impacts on wetlands or waters of the U.S. or of the state

The new treated water reservoir site would result in the permanent loss of a 0.04-acre perennial spring wetland. The project would avoid direct work within Alameda Creek as the new 78-inch pipeline would be installed 40 feet under the creek using micro-tunneling construction method and the associated launching and receiving pits and staging area would be set back at least 100 feet from the banks of the creek. Stormwater runoff and watering for dust control could carry sediment and pollutants from temporarily disturbed areas during construction to Alameda Creek. Groundwater encountered during excavation could be discharged to Alameda Creek and could

result in discharge of sediment and other pollutants to the creek. This would be a significant impact.

- *Mitigation Measure BIO-1a: Conduct Mandatory Biological Resources Awareness Training for All Project Personnel*
- *Mitigation Measure BIO-1b: Install Wildlife Exclusion Fencing along the Perimeter of the Construction Work Area and Implement General Measures to Avoid Impacts to Special-Status Species and Sensitive Natural Communities*
- *Mitigation Measure BIO-1d: Prepare and Implement a Vegetation Restoration and Compensation Plan*
- *Mitigation Measure BI0 -13: Minimize Disturbance of Waters of the United States and Waters of the State, Including Wetlands*
- *Mitigation Measure HYD-1a: Construction Water Quality Best Management Practices*

Impact HYD-1: Project construction could degrade water quality of Alameda Creek and wetlands as a result of erosion and sedimentation or a hazardous materials release

The proposed Project would include earthmoving, construction dewatering, and handling of hazardous materials. These activities could result in the release of sediment and other pollutants that, if introduced to runoff and be transported to surface water bodies, would degrade water quality and potentially violate water quality standards. This would be a significant impact.

- *Mitigation Measure HYD-1a: Construction Water Quality Best Management Practices*
- *Mitigation Measure HYD-1b: Management of Dewatering Effluent Discharges*
- *Mitigation Measure HAZ-1b: Preparation of a Construction Risk Management Plan*
- *Mitigation Measure AIR-2a: : Implementation of Dust Control Plan*
- *Mitigation Measure AIR-2b: Implementation of BAAQMD Dust Control Measures*

Impact HYD-2: Project construction could deplete groundwater resources and Alameda Creek flows

To safely and efficiently complete work, standing groundwater in the excavated areas would be pumped out of the excavated area, a process referred to as dewatering. It is possible that a substantial amount of groundwater would need to be pumped out of the launching and receiving pits for the micro-tunnel under Alameda Creek, if encountered, to maintain a dry work area during excavation. If Alameda Creek if flowing during dewatering, it is possible that dewatering could cause a decline in the creek water level, which could strand fish in pools and cause stress and mortality to these individuals. This would be a significant impact.

- *Mitigation Measure HYD-2: Maintenance of Alameda Creek Flows during Construction Dewatering*

Impact HYD-3: Project construction activities could temporarily alter site drainage patterns

Excavation and temporary stockpiling of spoils could temporarily affect the existing drainage pattern of the Project site in a manner that could result in substantial erosion or siltation on- or off-site. For example, stockpiling of spoils could redirect stormwater drainage in a manner that increases scour and erosion. Shoring used during excavation as well as staging of materials and

equipment could also alter site drainage patterns in a manner that would increase scour and erosion. This would be a significant impact.

- *Mitigation Measure HYD-1a: Construction Water Quality Best Management Practices*

Impact HYD-7: Project operation could result in increased stormwater runoff due to new impervious surfaces

The proposed project would create approximately 4.6 acres of new impervious surfaces where new facilities would be installed. Impervious surfaces prevent natural absorption and pollutant filtration of storm runoff compared to natural vegetated pervious ground cover, which could result in greater volume and velocity of runoff and potentially increased sediment and pollutant load discharged to creeks and greater velocity where water enters the creek, which could result in increased scour and erosion of creek banks. To reduce new impervious surfaces, the Project would use pervious asphalt for the new 0.2 acre parking area at the flocculation and sedimentation basin and, as part of placement of spoils at Nursery Site 1, removing approximately 0.6 acres of existing pavement, remove existing impervious tarps, and decompact soils and restore it to natural grassland. Restoration of this 19 acre site would result in significantly more pervious ground cover, which would reduce existing stormwater runoff from being transported through this area to Alameda Creek. The increase in impervious surface would be a significant impact. Consistent with the Alameda County Clean Water Program, impacts of additional stormwater runoff on creek hydrology, morphology, and water quality would be reduced to less than significant if the post-project runoff does not exceed the pre-project rates and durations and treatment for runoff is provided.

- *Mitigation Measure HYD-7: Incorporate Alameda County Clean Water Program Design Measures to Accommodate Additional Runoff from New Impervious Surfaces*

Impact HAZ-1: Construction of the proposed project could create potential hazards through transportation, use, and disposal of hazardous materials

Construction activities would include the routine use, transport, and disposal of hazardous materials, including fuels, oils, chemicals and other materials. Heavy earthmoving equipment would use large quantities of petroleum hydrocarbon-based fuels and lubricants. Improper transportation, use, storage, and disposal of these materials could result in exposure of construction workers or the public to these hazardous materials. This would be a significant impact.

- *Mitigation Measure HAZ-1a: Soil Investigation Prior to Construction*
- *Mitigation Measure HAZ-1b: Preparation of a Construction Risk Management Plan*

Impact HAZ-2: Construction of the proposed project could create the potential for upset and accident conditions involving the release of hazardous materials in the environment

Hazardous materials would be used for the operation of heavy equipment during project construction. These hazardous materials may include fuels, oil, and other materials used in equipment maintenance. Improper equipment use or accident conditions could result in incidental releases or spills, potentially posing health risks to workers, the public and the environment. This would be a significant impact.

- *Mitigation Measure HAZ-1a: Soil Investigation Prior to Construction*
- *Mitigation Measure HAZ-1b: Preparation of a Construction Risk Management Plan*

Impact HAZ-3: Construction of the proposed project could create the potential to encounter hazardous materials in soil and groundwater

Soils and groundwater within the project site may contain hazardous materials related to past agricultural land uses and hazardous materials stored and used at the SVWTP. The Phase I report concluded that several areas on the project site may be contaminated, and recommended additional soil and groundwater sampling to determine the presence of hazardous materials. The presence of contaminated soils or groundwater at these sites, if encountered, could pose a risk to construction workers or the environment. This would be a significant impact.

- *Mitigation Measure HAZ-1a: Soil Investigation Prior to Construction*
- *Mitigation Measure HAZ-1b: Preparation of a Construction Risk Management Plan*

Impact AG-1: Operation of the proposed project could result in conversion of farmlands to non-agricultural uses

The proposed project would result in the permanent conversion of approximately 21 acres of Unique Farmland for the placement of spoils at Nursery Site 1 and Nursery Site 2. This would be a significant impact.

- *Mitigation Measure AG-1: Compensation for loss of Unique Farmland*

Cumulative Impact on Aesthetics

The Project would contribute considerably to a cumulative impact to the scenic character of the Sunol Valley due to removal of vegetation.

- *Mitigation Measure BIO-1d: Prepare and Implement a Vegetation Restoration and Compensation Plan*

Cumulative Impact on Cultural Resources

The Project would contribute to a cumulative impact to previously undiscovered archeological and paleontological resources, as well as human remains.

- *Mitigation Measure CR-2: Procedures to be Followed in the Event of an Accidental Discovery*
- *Mitigation Measure CR-3: Protection of Human Remains if Encountered during Excavation Activities*
- *Mitigation Measure CR1-a: Conduct Preconstruction Surveys for Significant Paleontological Resources in Areas of Undetermined and High Paleontological Sensitivity*
- *Mitigation Measure CR1-b: Paleontological Resources Worker Awareness Training*
- *Mitigation Measure CR1-c: Perform Preconstruction Surface Salvage of Any Significant Paleontological Resources Discovered*
- *Mitigation Measure CR1-d: Conduct Paleontological Resources Monitoring during Construction in Areas of Undetermined and High Paleontological Sensitivity, as Required*

- *Mitigation Measure CR1-e: Stop Work if Known or Suspected Paleontological Resources Are Encountered*

Cumulative Impact on Transportation and Circulation

Due to the potential for overlapping projects in the Sunol valley region as ell as for construction associated within Calaveras Road as an access route to all project sites, the project would contribute considerably to a significant traffic impact.

- *Mitigation Measure CUM-1: Combined Sunol Valley Traffic Control Plan*
- *Mitigation Measure TRANS-1: Preparation and Implementation of Traffic-Control Plan*

Cumulative Impact to Noise and Vibration

The Project could contribute considerably to a cumulative impact to noise resulting from night-time traffic on Calaveras Road if more than 14 trucks per hour use Calaveras Road at night. Additionally, overlapping construction schedules of the Project and the Alameda Siphon No. 4 Project, New Irvington Tunnel, and the San Antonio Backup Pipeline Project could result in cumulative noise and vibration impacts at night, to which the Project would contribute considerably.

- *Mitigation Measure NOI-1: Implementation of Noise Controls*

Cumulative Impacts to Air Quality and Climate

The Project would contribute considerably to potentially significant cumulative construction air quality emission impacts, including impacts related to PM_{10}, $PM_{2.5}$ and ozone precursors.

- *Mitigation Measure AIR-2a: Implementation of Dust Control Plan*
- *Mitigation Measure AIR-2b: Implementation of BAAQMD Dust Control Measures*
- *Mitigation Measure AIR-2c: Implementation of BAAQMD Exhaust Control Measures*

Cumulative Impact to Recreation

The Project would contribute considerably to potentially significant cumulative construction impact on access to recreational facilities and bicyclists due to increase in traffic on Calaveras Road.

- *Mitigation Measure TRANS-1: Preparation and Implementation of Traffic Control Plan*

Cumulative Impact to Utilities and Service Systems

The Project would contribute considerably to potentially significant impact on utilities and service systems.

- *Mitigation Measure UTL-2: Avoid Conflicts with Existing Utilities and Coordinate Efforts with Affected Utilities*

Cumulative Impact on Biological Resources

Within the Sunol Valley, the Project could contribute considerably to significant cumulative impacts to: grassland (including upland habitat for California tiger salamander, California red-

legged frog, burrowing owl, and Alameda whipsnake); riparian vegetation and the Alameda Creek channel (including habitat for resident rainbow trout, foothill yellow-legged frog, western pond turtle, and California red-legged frog); and individual trees that could provide nesting for special-status bird and bat species. Construction discharges could affect water quality in Alameda Creek and its habitat for common and special-status species. Additionally, if barriers to steelhead migration were removed, it is possible that steelhead could eventually be present in the project work area within the Sunol Valley; the Project could contribute to a cumulative impact to steelhead, if present.

- *Mitigation Measure BIO-1a: Conduct Mandatory Biological Resources Awareness Training for All Project Personnel*
- *Mitigation Measure BIO-1b: Install Wildlife Exclusion Fencing along the Perimeter of the Construction Work Area and Implement General Measures to Avoid Impacts to Special-Status Species and Sensitive Natural Communities*
- *Mitigation Measure BIO-1c: Conduct Pre-Construction Surveys and Monitor Construction Activities for California Tiger Salamander, California Red-Legged Frog, Western Pond Turtle, and Alameda Whipsnake*
- *Mitigation Measure BIO-1d: Prepare and Implement a Vegetation Restoration and Compensation Plan*
- *Mitigation Measure BIO-1e:* Compensate *for Permanent Loss of Upland Habitat for California Tiger Salamander, California Red-Legged Frog, and Alameda Whipsnake*
- *Mitigation Measure BIO-5: Conduct Preconstruction Surveys for Active Burrowing Owl Burrows and Implement CDFG Guidelines for Burrowing Owl Mitigation, if Necessary*
- *Mitigation Measure BIO-6: Remove Trees and Shrubs during the Non-breeding Season (August 16–February 14) for Birds or Conduct Nesting Bird Surveys, and Establish No-Disturbance Buffers, as Appropriate*
- *Mitigation Measure BIO-7: Conduct Preconstruction Surveys for Sensitive Bats and Implement Avoidance and Minimization Measures if Found*
- *Mitigation Measure BIO-10: Conduct Pre-Construction Surveys for Dusky-footed Woodrat and Implement Avoidance and Minimization Measures if Found*
- *Mitigation Measure BI0 -13: Minimize Disturbance of Waters of the United States and Waters of the State, Including Wetlands*
- *Mitigation Measure HYD-1a: Construction Water Quality Best Management Practices*
- *Mitigation Measure HYD-1b: Management of Dewatering Effluent Discharges*
- *Mitigation Measure HYD-7: Incorporate Alameda County Clean Water Program Design Measures to Accommodate Additional Runoff from New Impervious Surfaces*

Cumulative Impact to Hydrology and Water Quality

The Project would contribute considerably to a cumulative impact to surface water quality due to, among other things, discharges of stormwater, dewatering effluent, and tunnel drainage. The Project would also contribute considerably to a cumulative impact to temporary reduction in water level flow in Alameda Creek and hydrology due to alteration of topography and an increase in impervious areas at the project site and the vicinity, resulting in downstream erosion impacts in local creeks.

- *Mitigation Measure HYD-1a: Construction Water Quality Best Management Practices*
- *Mitigation Measure HYD-1b: Management of Dewatering Effluent Discharges*

- *Mitigation Measure HYD-2: Maintenance of Alameda Creek Flows during Construction Dewatering*
- *Mitigation Measure HYD-7: Incorporate Alameda County Clean Water Program Design Measures to Accommodate Additional Runoff from New Impervious Surfaces*

Cumulative Impact to Hazards and Hazardous Materials

The Project would contribute considerably to a cumulative impact related to exposure of workers to hazardous materials if they work on multiple projects in the Sunol Valley.

- *Mitigation Measure HAZ-1a: Soil Investigation Prior to Construction*
- *Mitigation Measure HAZ-1b: Preparation of a Construction Risk Management Plan*

Cumulative Impacts to Agricultural Resources

The Project would contribute considerably to a cumulative impact to agricultural resources associated with the conversion of areas mapped as Unique Farmland.

- *Mitigation Measure AG-1: Compensation for loss of Unique Farmland*

IV. SIGNIFICANT IMPACTS THAT CANNOT BE AVOIDED OR REDUCED TO A LESS-THAN-SIGNIFICANT LEVEL

The Project does not have any Project-specific significant and unavoidable impacts. Because the Project is a component of the WSIP, it will contribute to the significant and unavoidable impacts caused by the WSIP water supply decision. These impacts were discussed in this Commission's Resolution No. 08-0200, and mitigation measures that were proposed in the Program EIR were adopted by this Commission for these impacts; however, the mitigation measures could not reduce the impacts to a less than significant level, and the impacts were determined to be significant and unavoidable. This Commission has already adopted the mitigation measures proposed in the Program EIR to reduce these impacts when it approved the WSIP in its Resolution No. 08-0200. This Commission also adopted a Mitigation Monitoring and Reporting Program as part of that approval. The findings regarding the following impacts and mitigation measures set forth in Resolution No. 08-0200 are incorporated into these findings by this reference, as though fully set forth herein. The significant and unavoidable impacts were listed in Resolution No. 08-0200 as follows:

Potentially Significant and Unavoidable WSIP Water Supply Impacts

- **Fisheries (Upper and Lower Crystal Springs Reservoir)**: Effects in the Peninsula watershed on fishery resources in Crystal Springs Reservoir in San Mateo County; and
- **Growth**: Indirect growth-inducement impacts in the SFPUC service area.

Significant and Unavoidable WSIP Water Supply Impacts

- **Streamflow (Alameda Creek below Alameda Creek Diversion Dam)**: Effects on stream flow in Alameda Creek between the diversion dam and the confluence with Calaveras Creek.

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
- Increase delivery reliability
- Meet customer water supply needs through 2018
- Enhance sustainability
- Achieve a cost-effective, fully operational system

The Project contributes to achievement of these goals. In addition, the Project was designed to ensure adequate service over time and to resist damage from earthquakes. Specifically, the objectives of the Project are to:

- Comply with the CDPH Compliance Order to provide treated water storage to serve as a buffer for potential treatment failures at the SVWTP;
- Add redundant facilities at the SVWTP to improve treatment reliability by increasing the plant's "sustainable capacity" to 160 mgd, defined as the ability to treat 160 mgd for at least 60 days with the largest piece of equipment or process component (e.g., flocculation and sedimentation basin) out of service for maintenance (overall hydraulic peak capacity at the plant would remain 160 mgd);
- Provide ability to reliably augment water supply with as much as 160 mgd of water from the Alameda Creek watershed during unplanned outages of the Hetch Hetchy supply; and
- Provide ability to sustainably treat as much as 160 mgd of Hetch Hetchy water at the SVWTP during an unplanned Hetch Hetchy water quality event.

B. Alternatives Rejected and Reasons for Rejection

Although the Project would have no project-specific significant and unavoidable impacts, it would contribute to significant and unavoidable impacts identified in the WSIP PEIR. 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 infeasible such Alternatives. In making these 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 existing SVWTP would continue to operate as under current conditions. This alternative would avoid all of the impacts associated with the proposed Project. However, under this alternative, the SVWTP would not meet the requirements of the CDPH to provide treated water storage to serve as a balancing reservoir that the SFPUC is obligated to fulfill. Hence the SVWTP would continue to operate out of compliance with the CDPH Compliance Order.

Further, under this alternative, the existing sustainable capacity would remain at 120 mgd, which is below the SFPUC's objective to sustainably augment water supply with up to 160 mgd of water from the Alameda Watershed during unplanned Hetch Hetchy outage or water quality event. The SVWTP would continue to operate with limited storage capacity and operational redundancy such that, following a major seismic event or unplanned Hetch Hetchy water quality event requiring a higher volume of water treatment at the SVWTP, the SVWTP could be constrained in its ability to contain on-site or treat the water to regulatory standards prior to its transport into the regional water system. In such situations, failure to take action could lead to future environmental impacts to aesthetics, traffic, noise and vibration, air quality, hydrology and water quality, and hazards and hazardous materials associated with the need to construct emergency storage and supply systems and/or transportation of emergency water. Such emergency facility repairs or facility installation could potentially result in greater impacts to environmental resources as compared to the proposed Project because there may not be adequate time to perform studies and locate activities away from sensitive environmental resources.

Because of the need to comply with the CDPH requirements, the likelihood of a severe seismic event in the near future, and the potential for an unplanned Hetch Hetchy water quality event that could require increased water treatment at the SVWTP, the Commission rejects this alternative. The U.S. Geological Survey has estimated a 62 percent probability of at least one magnitude 6.7 or greater earthquake between 2003 and 2032. This alternative would leave SFPUC water customers vulnerable to the impacts of an interruption of water supply if sufficient water meeting regulatory requirements can not be served.

Alternative 2: Regulatory Compliance Alternative

This alternative would include construction of the essential facilities to comply with the CDPH Compliance Order, which include the:

- New treated water reservoir;
- Chlorine contact tank;

- 78-inch discharge pipe under Alameda Creek;
- New chemical storage and feed facilities; and
- Miscellaneous piping, valves, mechanical and electrical work.

The facilities that would not be built under this alternative are the flocculation/sedimentation basin and associated modifications to the flow distribution chamber, pipeline to the new flocculation basin, and pipeline to the settled water conduit, wash water recovery basin, upgraded filters, and new air blower associated with backwashing the filters.

Hence, to meet the requirements of the CDPH the same major facilities proposed under the proposed Project would still be constructed under this alternative.

The installation of the components under this alternative would contribute in general to the Project goals of improving operational flexibility and reliable delivery of water meeting regulatory standards by increasing on-site storage capacity. Namely, in the event of a treatment upset, water could be contained in the new chlorine contact tank and treated water reservoir, thereby preventing untreated water from entering the transmission system. The treated water reservoir would also serve as a balancing reservoir that would facilitate plant operation and thereby support reliable water treatment and supply. However, this alternative would not fully meet the SFPUC's objective of increasing the sustainable capacity of the plant from 120 mgd to 160 mgd because it eliminates construction of the fifth flocculation and sedimentation basin. Each flocculation and sedimentation basin in conjunction with the filter galleries (also referred to as a treatment train) can treat 40 mgd of water. Therefore, in order to treat 160 mgd due to an unplanned seismic or water quality event, all four existing basins would need to be fully operational. At a large facility such as the SVWTP, preventative maintenance is an ongoing activity that typically requires major equipment, such as the flocculation and sedimentation basin, to be out of service for extended periods. Therefore, if an unplanned seismic or water quality event occurred when one of the treatment plants is out of service, the plant would not be able to adequately treat to the full 160 mgd that may be required. Hence this alternative would only partially meet the SFPUC's objective to sustainably augment water supply with up to 160 mgd of water from the Alameda Watershed during unplanned Hetch Hetchy outage or water quality event..

Because the facilities contributing the most to significant impacts due to their size (i.e., treated water reservoir and chlorine contact tank) and location (i.e., 78-inch pipeline under Alameda Creek) would still be constructed, significant impacts of this alternative would be similar to the proposed Project for many resource areas. Significant impacts would be only slightly reduced for the following resource areas because of a slight decrease in the extent of excavation and associated equipment and materials: traffic, noise and vibration, air quality, hydrology and water quality, hazards and hazardous materials, and minerals and energy.

Although this alternative would meet the SFPUC's objective of complying with the CDPH requirements, the Commission rejects this alternative because it would not substantially lessen significant impacts of the proposed Project and would not meet the SFPUC's to sustainably augment water supply with up to 160 mgd of water from the Alameda Watershed during

unplanned Hetch Hetchy outage or water quality event.. Further this alternative would not substantially decrease costs while it eliminates the significant value of important facility and system redundancy to sustainably treat up to 160 mgd with only very minimal additional impacts as compared to not constructing the facilities.

Alternative 3: Above Ground Treated Water Reservoir Alternative

This alternative would construct the new treated water reservoir approximately 1 mile north of the existing SVWTP. Additional facilities to the proposed Project that would be constructed under this alternative include: a pipeline to move water from the existing SVWTP discharge pipeline to the new treated water reservoir; a new pumping plant to move the water through this pipeline because of the existing effluent pipeline would be lower than the new site (i.e., it could not flow to the reservoir via gravity); a new overhead power line to supply electricity to the pumping plant; and a new paved permanent access road and bridge from Calaveras Road that would require abutments and at least one intermediate piling in the Alameda Creek channel. Pumping the water from the treated water reservoir would require approximately 6 million kilowatt hours of energy per year. The chlorine contact tank, flocculation and sedimentation basin, and other project components would still be constructed at the existing SVWTP as under the proposed Project.

This alternative was analyzed because it would substantially reduce the amount of excavation and spoils disposal which, under the propose Project, contribute to significant environmental effects. This alternative would generate approximately 175,000 cubic yards of spoils, less than half of the proposed Project. Spoils would be hauled either via Calaveras Road or via a temporary haul route that would be constructed parallel to Calaveras Road that would require a temporary free span bridge of approximately 120 feet would across Alameda Creek. However, while this alternative would reduce significant impacts associated with agriculture, all other impacts would be similar to or greater than those of the proposed Project primarily because it is a new above ground facility in an otherwise relatively undeveloped area instead of being adjacent to the existing SVWTP in a previously disturbed area. Most notably, this alternative would increase impacts to traffic on Calaveras Road, aesthetics due to the greater visibility of the above ground treated water reservoir and pumping plant from Calaveras Road; biological resources due to increase in the area of disturbance in an otherwise undeveloped area and activities affecting Alameda Creek; hydrology due to siting facilities in the middle of the floodplain between two creek channels; operational noise in close proximity to a private residence; and energy usage and greenhouse gas emissions associated with the requisite pumping plant.

Although this alternative would meet all of the SFPUC's project objectives, the Commission rejects this alternative because it would not substantially lessen most of the significant impacts of the Project and in fact would have greater environmental impacts for most resource areas. Moreover, this alternative would require higher construction cost and require installation of a new pump station, which would substantially increase energy use during operation thereby resulting in increased greenhouse gas emissions. Moreover, this alternative would result in more complicated, and thus more expensive, maintenance and system operation scenarios because it essentially involves operating a whole new facility and is not gravity operated.

VI. STATEMENT OF OVERRIDING CONSIDERATIONS

Although the Project would have no project-specific significant and unavoidable impacts, it would contribute to significant and unavoidable impacts identified in the WSIP PEIR. Pursuant to CEQA section 21081 and CEQA Guideline 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 specially 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 proposed 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 have the following benefits:

- Comply with the CDPH Compliance Order to provide treated water storage to serve as a buffer for potential treatment failures at the SVWTP;
- Add redundant facilities at the SVWTP to improve treatment reliability by increasing the plant's "sustainable capacity" to 160 mgd, defined as the ability to treat 160 mgd for at least 60 days with the largest piece of equipment or process component (e.g., flocculation and sedimentation basin) out of service for maintenance (overall hydraulic peak capacity at the plant would remain 160 mgd);
- Provide ability to reliably augment water supply with as much as 160 mgd of water from the Alameda Creek watershed during unplanned outages of the Hetch Hetchy supply; and
- Provide ability to sustainably treat as much as 160 mgd of Hetch Hetchy water at the SVWTP during an unplanned Hetch Hetchy water quality event.

In addition, the Project implements the WSIP's goals and objectives, and the Statement of Overriding Considerations from SFPUC Resolution 08-0200 is adopted and incorporated in these findings as though fully set forth. In particular, this Project helps to implement the following benefits of the WSIP:

1. Implementation of facility improvement projects will reduce vulnerability to earthquakes. Improvements are designed to meet current seismic standards. The regional water system

is a critical and vulnerable link in the City's and wholesale customer's ability to survive after a major earthquake and to maintain access to critically needed water supplies. The SFPUC will be able to meet the fundamental and most pressing needs of the water system – to improve the seismic safety and reliability of the water system as a means of saving human life and property under a catastrophic earthquake scenario or even a disaster scenario not rising to the level of catastrophic. Effecting the necessary repairs and improvements to assure the water system's continued reliability, and developing it as part of a larger, integrated water security strategy, is critical to the Bay Area's economic security, competitiveness and quality of life.

2. The SFPUC will be able to deliver basic service to the three regions in the service area (East/South Bay, Peninsula, and San Francisco) within 24 hours after a major earthquake.

3. The Water system will maintain a high quality water system.

4. Improvements are designed to meet current and foreseeable future federal and state water quality requirements.

5. The WSIP will increase delivery reliability and improve the ability to maintain the water system, providing operational flexibility to allow planned maintenance shutdown of individual facilities without interrupting customer service, operational flexibility to minimize the risk of service interruption due to unplanned facility upsets or outages, and operational flexibility and system capacity to replenish local reservoirs as needed. In order to implement a feasible asset management program in the future that will provide continuous maintenance and repairs to facilities, the regional water system requires redundancy (i.e., backup) of some critical facilities necessary to meeting day-to-day customer water supply needs. Without adequate redundancy of critical facilities, the SFPUC has limited operational flexibility in the event of an emergency or a system failure, as well as constraints on conducting adequate system inspection and maintenance.

6. The WSIP will achieve a cost-effective, fully operational system, ensuring cost-effective use of funds, maintaining a gravity-driven system.

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