File No. 101302

Committee Item No. 5
Board Item No. 21

COMMITTEE/BOARD OF SUPERVISORS

AGENDA PACKET CONTENTS LIST

Committee: Budget and Finance Committee **Date:** November 3, 2010

Board of Supervisors Meeting **Date** 11/09/10

Cmte	Board	
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OTHER		(Use back side if additional space is needed)
☒	☒	Draft Environmental Impact Report**
☒	☒	Environmental Impact Report Comments and Responses**
☐	☐	_____
☐	☐	_____
☐	☐	_____

Completed by: Victor Young **Date:** October 29, 2010
Completed by: Victor Young **Date:** 10-4-10

An asterisked item represents the cover sheet to a document that exceeds 25 pages. The complete document is in the file.

[Harry Tracy Water Treatment Plant Improvements Project Findings]

Resolution adopting findings under the California Environmental Quality Act (CEQA), including the adoption of a mitigation monitoring and reporting program and a statement of overriding considerations related to the Harry Tracy Water Treatment Plant Long-Term Improvements Project No. CUW36701, part of the Water System Improvement Program, for the improvements to the regional water supply system; and directing the Clerk of the Board of Supervisors to notify the Controller of this action.

WHEREAS, The San Francisco Public Utilities Commission (SFPUC) has developed a project description for the Harry Tracy Water Treatment Plant ("HTWTP") Long-Term Improvements Project, Project No. CUW36701, a water infrastructure project included as part of the Water System Improvement Program ("WSIP") (the "Project"). The Project is located on 52.3 acres in an unincorporated area of San Mateo County. A small portion of the site is within the City of Millbrae. The Project includes treatment process improvements and other upgrades to the plant such as pipeline distribution, access, and site improvements. The treatment process will generally be the same. The primary differences will be to solids handling, whereby solids from the sludge holding tank will be transferred to a solids dewatering facility before being trucked off site, and to the treated water storage, which will occur in a single new tank north of the main plant site instead of two tanks southeast of the main plant; and

WHEREAS, The objectives of the Project are to support the facility's role within the SFPUC regional water system with respect to water quality, seismic response, and delivery reliability through the year 2030, and to produce adequate water supply to meet water delivery needs in the service area through the year 2018, while maximizing the use of existing SFPUC

facilities and infrastructure, maintaining a gravity-driven system, and allowing for timely construction of proposed facilities. Further, the proposed project aims to improve water treatment in the Peninsula region by ensuring that locally stored water is potable, improving delivery reliability by installing redundant features, and improving seismic reliability through structural reinforcements and slope stabilization measures; and

WHEREAS, An environmental impact report ("EIR") as required by the California Environmental Quality Act ("CEQA") was prepared for the Project in Planning Department File No. 2007.1202E; and

WHEREAS, The Final EIR ("FEIR") was certified by the San Francisco Planning Commission on October 14, 2010 by Motion No. 18197; and

WHEREAS, The FEIR prepared for the Project is tiered from the WSIP Program Environmental Impact Report ("PEIR") certified by the Planning Commission on October 30, 2008 by Motion No. 17734; and

WHEREAS, Thereafter, the SFPUC approved the WSIP and adopted findings and a Mitigation Monitoring and Reporting Program (PEIR MMRP) as required by CEQA on October 30, 2008 by Resolution No. 08-200; and

WHEREAS, On October 15, 2010, the SFPUC, by Resolution No. 10-0176, a copy of which is included in Board of Supervisors File No. 101302 and which is incorporated herein by this reference: (1) approved the Project; (2) adopted findings (CEQA Findings), including a statement of overriding considerations, and a Mitigation Monitoring and Reporting Program (MMRP) required by CEQA; and

WHEREAS, The Project files, including the FEIR, PEIR and SFPUC Resolution No. 10-0176 have been made available for review by the Board and the public, and those files are considered part of the record before this Board; and

WHEREAS, The Board of Supervisors has reviewed and considered the information and findings contained in the FEIR, PEIR and SFPUC Resolution No. 10-0176, and all written and oral information provided by the Planning Department, the public, relevant public agencies, SFPUC and other experts and the administrative files for the Project; and

WHEREAS, This Board of Supervisors adopted Ordinance No. 0092-10 that placed WSIP appropriated funds on Controller's Appropriation Reserve, by project, making release of appropriation reserves by the Controller subject to the prior occurrence of: (1) the SFPUC's and the Board's discretionary adoption of CEQA Findings for each project, following review and consideration of completed project-related environmental analysis, pursuant to CEQA, the State CEQA Guidelines, and Chapter 31 of the San Francisco Administrative Code, where required, and (2) the Controller's certification of funds availability, including proceeds of indebtedness. The ordinance also placed any project with construction costs in excess of $100 million on Budget and Finance Committee reserve pending review and reserve release by that Committee. Therefore, the SFPUC has sent a letter to the Budget and Finance Committee requesting review and release of the portion of those funds necessary for Project No. CUW36701; now, therefore, be it

RESOLVED, That the Board of Supervisors has reviewed and considered the FEIR and record as a whole, finds that the FEIR is adequate for its use as the decision-making body for the action taken herein including, but not limited to, approval of the Project and adopts and incorporates by reference as though fully set forth herein the CEQA Findings, including the statement of overriding considerations, and the MMRP contained in Resolution No. 10-0176; and be it

FURTHER RESOLVED, That the Board finds that the Project mitigation measures set forth in the FEIR and the MMRP and adopted by the SFPUC and herein by this Board will be implemented as reflected in and in accordance with the MMRP; and be it

FURTHER RESOLVED, The Board finds that since the FEIR was finalized, there have been no substantial project changes and no substantial changes in Project circumstances that would require major revisions to the FEIR due to the involvement of new significant environmental effects or an increase in the severity of previously identified significant impacts, and there is no new information of substantial importance that would change the conclusions set forth in the FEIR; and be it

FURTHER RESOLVED, That the Board directs the Clerk of the Board to forward this Resolution to the Controller.

CITY AND COUNTY OF SAN FRANCISCO

BOARD OF SUPERVISORS

BUDGET AND LEGISLATIVE ANALYST

1390 Market Street, Suite 1150, San Francisco, CA 94102 (415) 552-9292
FAX (415) 252-0461

October 28, 2010

TO: Budget and Finance Committee

FROM: Budget and Legislative Analyst

SUBJECT: November 3, 2010 Budget and Finance Committee Meeting

TABLE OF CONTENTS

Items 4 and 5 Files 10-1297 and 10-1302	Department: Public Utilities Commission (PUC)

EXECUTIVE SUMMARY

Legislative Objectives

- File 10-1297: Request to release $290,496,495 reserved by the Budget and Finance Committee to fund the construction of the Harry Tracy Water Treatment Plant (HTWTP) Project.
- File 10-1302: Resolution adopting findings under the California Environmental Quality Act (CEQA) for the HTWTP Project, and directing the Clerk of the Board of Supervisors to notify the Controller of this action.

Key Points

- As of April 13, 2010, the Board of Supervisors has appropriated a total of $359,063,409 for the Harry Tracy Water Treatment Plant (HTWTP) Project, including (a) $54,091,322 in various appropriations, which are currently unreserved, and (b) $304,972,087 in appropriated and reserved funds (File 10-0337).
- File 10-0337 placed the entire appropriation of $304,972,087 on two separate but overlapping reserves including (a) a Budget and Finance Committee reserve, and (b) a Controller's reserve pending approval of Environmental Impact Reports (EIRs) prepared pursuant to the California Environmental Quality Act (CEQA).
- The HTWTP Project, one of the 86 separate capital improvement projects under the PUC's Water System Improvement Program (WSIP) is designed to provide increased water delivery capacity and seismic reliability throughout the Hetch Hetchy water system.

Fiscal Impact

- The PUC's current estimated cost of $352,500,000 for the HTWTP Project, is $6,563,409 or 1.8 percent less than the $359,063,409 previous estimated cost.
- As of September, 2010, out of the $54,091,322 in previously appropriated and unreserved funds, the PUC has expended $32,585,432, such that the PUC (a) has $21,505,890 in available unreserved and unexpended funds, and (b) still needs an estimated $319,914,568 ($352,500,000 in total estimated project costs less $32,585,432 previously expended). The PUC anticipates funding the additional needed $319,914,568 by expending (a) $21,505,890 in available unreserved and unexpended funds, and (b) $298,408,678 from the $304,972,087 which is currently on reserve.
- The PUC inadvertently requested release of $290,496,495, instead of the correct needed $298,408,678 for the HTWTP Project. Approval of the correct requested release of $298,408,678 would still leave $6,563,409 remaining on Budget and Finance Committee reserve ($304,972,087 less $298,408,678).
- The $319,914,568 in total estimated needed expenditures include (a) $279,255,000 (including a ten percent contingency) for construction costs, and (b) $40,659,568 for non-construction costs. Of the $40,659,568 in total estimated needed non-construction costs, the PUC anticipates

expending (a) $21,505,890 in available unreserved and unexpended funds, and (b) $19,153,678 of the requested release of $298,408,678 for estimated additional needed non-construction expenditures. Actual construction costs will be known after construction bids are received on December 9, 2010.

Recommendations

- Increase the requested release of reserve funds by $7,912,183, from the requested incorrect amount of $290,496,495 to $298,408,678 (File 10-1297).
- Replace the existing Budget and Finance Committee reserve on the requested $298,408,678 with a Controller's reserve, and request the Controller, after receiving supporting documentation from the PUC, to release the amount of construction funds equal to the lowest responsive construction bid received by the PUC, plus a ten percent construction contingency.
- Release the estimated additional needed non-construction amount of $19,153,678 (the total requested release amount of $298,408,678 less $279,255,000 in estimated additional needed construction costs).
- Request the Controller to return any remaining unneeded funds to a Budget and Finance Committee reserve.
- Approve the proposed resolution adopting the findings under (CEQA) (File 10-1302).

MANDATE STATEMENT / BACKGROUND

Mandate Statement

Section 3.3 of the City's Administrative Code provides that the committee of the Board of Supervisors that has jurisdiction over the budget (i.e., Budget and Finance Committee) may place requested expenditures on reserve which are then subject to release by the Budget and Finance Committee.

In accordance with the California Environmental Quality Act (CEQA), any public agency that makes a discretionary decision to approve a project that has a potential to result in a direct physical change in the environment must comply with CEQA by adopting specific findings prior to the approval of the project. The Board of Supervisors previously placed a Controller's reserve on the Harry Tracy Water Treatment Plant Project under the PUC's Water System Improvement Program (WSIP), pending adoption of the CEQA findings after reviewing the individual project's Environmental Impact Report (EIR). Under CEQA, the Board of Supervisors cannot delegate this responsibility to review the CEQA analysis before it makes its decision to fund specific projects.

Background

The PUC's Water System Improvement Program (WISP) is a series of 86 separate capital improvement projects designed to provide increased water delivery capacity and seismic

reliability throughout the Hetch Hetchy water system. The 86 individual projects are categorized into five geographic regions and standalone projects, and have a current total estimated cost of $4,527,000,000, including financing costs.

On November 4, 2002, the voters of San Francisco approved Propositions A and E, which, in combination, authorized the PUC to issue an unlimited amount of Wastewater and Water Revenue Bonds, without subsequent voter approval, subject to approval by the Board of Supervisors, for PUC capital improvements related to water, wastewater, and power facilities.

As of April 13, 2010, the Board of Supervisors had previously appropriated the $359,063,409 in total estimated costs of the Harry Tracy Water Treatment Plant Project, including (a) $54,091,322 in various appropriations, which are currently unreserved, and (b) $304,972,087 in appropriated and reserved funds (File 10-0337). File 10-0337 placed the entire appropriation of $304,972,087 on two separate but overlapping reserves including (a) a Budget and Finance Committee reserve, and (b) a Controller's reserve pending approval of Environmental Impact Reports (EIRs) prepared pursuant to the California Environmental Quality Act (CEQA).

The Harry Tracy Water Treatment Plant (HTWTP) treats water pumped from the Peninsula for delivery to customers in Northern San Mateo County and San Francisco. According to the WSIP Regional Projects Quarterly Report for the 4th Quarter of FY 2009-2010, the HTWTP Project will increase the capacity of the HTWTP from 120 million gallons per day to 140 million gallons per day and improve seismic reliability following a major earthquake. The HTWTP Project includes: (a) extensive seismic, hydraulic, and electric upgrades throughout the Plant, (b) five new filters, (c) improvements to the washwater and sludge handling systems, (d) a new 11 million gallon treated water reservoir, and (e) associated piping and equipment replacement.

The PUC anticipates construction commencing on April 4, 2011 and ending November 20, 2015. According to Mr. Carlos Jacobo, Budget Director at the PUC, the completion date has been delayed by approximately five months, from June 12, 2015 to November 20, 2015, due to identified seismic risks associated with the discovery of the Serra Fault underneath the two existing water reservoirs. According to Mr. Jacobo, discovery of this Fault resulted in the PUC deciding to abandon the two existing water reservoirs located directly above the Fault and instead construct a new water reservoir and associated facility improvements.

DETAILS OF PROPOSED LEGISLATION

Of the total estimated project costs of $359,063,409 previously appropriated by the Board of Supervisors for the HTWTP Project, $304,972,087 is subject to two separate and overlapping reserves: (1) a Budget and Finance Committee reserve, and (2) a Controller's reserve pending the approval of EIR findings under CEQA.

The PUC is now requesting the release of $298,408,678 (the PUC inadvertently requested the release of $290,496,495) out of the total existing $304,972,087 on Budget and Finance

reserve to fund the total estimated remaining project costs of $319,914,568 associated with the Harry Tracy Water Treatment Plant (HTWTP) Project (File 10-1297).

The additional needed $21,505,890 ($21,505,890 in funds previously appropriated by the Board of Supervisors and not reserved) plus the correct requested amount of $298,408,678 previously appropriated and reserved by the Board of Supervisors equals the total additional estimated needed funds of $319,914,568.

The PUC is also requesting that the Board of Supervisors adopt findings under the California Environmental Quality Act (CEQA) for the Harry Tracy Water Treatment Plant Project, and direct the Clerk of the Board of Supervisors to notify the Controller of this action, such that the Controller can remove the overlapping separate reserve on the $304,972,087, which was previously appropriated and reserved by the Board of Supervisors for the HTWTP Project (File 10-1302).

According to Mr. Jacobo, the PUC's letter to the Board of Supervisors dated October 15, 2010, requesting the release of reserved funds inadvertently requested the release of $290,496,495, instead of the correct needed amount of $298,408,678. Therefore, the Budget and Legislative Analyst refers to the correct amount of $298,408,678 that is actually needed for release from Budget and Finance Committee reserve, in the remainder of this report.

Mr. Jacobo further notes that the PUC's letter also inadvertently identifies the Harry Tracy Water Treatment Plant Project as the New Irvington Tunnel Project.

FISCAL IMPACT

Approval of this request would result in the release of $298,408,678 of funds from Water Revenue Bond proceeds previously appropriated and placed on Budget and Finance Committee reserve by the full Board of Supervisors.

As discussed above, the Board of Supervisors has previously appropriated $359,063,409 for the total estimated costs of the PUC's Harry Tracy Water Treatment Plant Project, including (a) $54,091,322 in various appropriations which are currently unreserved, and (b) $304,972,087 appropriated on April 13, 2010 (File 10-0337) which is currently on two separate and overlapping reserves: (1) a Budget and Finance Committee reserve, and (2) a Controller's reserve pending the approval of EIR findings under CEQA.

The Budget and Legislative Analyst notes that although the original estimated Harry Tracy Water Treatment Plant (HTWTP) Project cost was $359,063,409, as of September 2010, the updated Project costs are $352,500,000, a reduction of $6,563,409 or 1.8 percent. Mr. Jacobo stated that this reduction in Project costs results from a refinement of the Project costs as the Project design progressed.

As shown in Table 1 below, as of September, 2010, the PUC had expended $32,585,432 for project management, planning, design and environmental review of the HTWTP Project, such

that an estimated $319,914,568 in Project costs are still needed to fund the total estimated project costs of $352,500,000.

Table 1: Harry Tracy Water Treatment Plant Long-Term Improvement Estimated Project Costs			
	Current Total Estimated Project Expenditures as of September 2010	**Previously Expended**	**Total Estimated Additional Needed Expenditures**
Project Management	$8,786,000	$5,738,345	$3,047,655
Planning	4,816,000	4,815,793	207
Environmental Review	2,422,000	1,835,431	586,569
Design	20,127,000	20,195,863	(68,863)
Bid and Award	685,000	0	685,000
Construction Management	36,255,000	0	36,255,000
Close-Out	154,000	0	154,000
Non-Construction Cost Subtotal	**$73,245,000**	**$32,585,432**	**$40,659,568**
Construction Cost	279,255,000	0	279,255,000
Total	**$352,500,000**	**$32,585,432**	**$319,914,568**

Given that the PUC has expended $32,585,432 out of the $54,091,322 which was previously appropriated by the Board of Supervisors and not reserved, $21,505,890 is available for remaining project expenditures. As shown in Table 2 below, the PUC intends to fund the remaining HTWTP Project costs of $319,914,568 with (a) $21,505,890 in unexpended and unreserved funds which were previously appropriated by the Board of Supervisors, and (b) the requested release of $298,408,678.

Table 2: Requested Reserve Release Amount	
Previously Appropriated by the Board of Supervisors	$54,091,322
Less Previously Expended (see Table 1)	32,585,432
Available Funds	**$21,505,890**
Requested Release of Reserved Funds	298,408,678
Total Estimated Additional Needed Expenditures (see Table 1)	**$319,914,568**

As also shown in Table 1 above, the total estimated non-construction costs are $40,659,568. In order to fund the $40,659,568 in total estimated needed non-construction costs, the PUC anticipates expending (a) $21,505,890 in available unreserved and unexpended funds, and (b) $19,153,678 of the requested release of $298,408,678 for estimated additional needed non-construction expenditures.

As also shown in Table 1 above, the total estimated construction costs are $279,255,000. According to Mr. Jacobo, the PUC issued a Request for Proposal (RFP) on October 15, 2010 for construction of the HTWTP Project, with bids due by December 9, 2010. Therefore, the actual construction costs will not be known until December 9, 2010. The Budget and Legislative Analyst notes that approval of this construction contract is not subject to Board of Supervisors' approval because the PUC is authorized to award construction contracts, using the City's normal

competitive bidding procedures, without subsequent Board of Supervisors approval, in accordance with Section 9.118(b) of the City's Charter.

The PUC is also requesting the Board of Supervisors approval of the proposed resolution (File 10-1302) to adopt the findings included in the CEQA-required environmental report for the Harry Tracy Water Treatment Plant Project. According to Mr. Jacobo, the San Francisco Planning Commission approved the CEQA-required environmental report on October 14, 2010. Mr. Jacobo advises that the environmental mitigation work and project modifications required by environmental permits are not anticipated to alter the current total estimated project cost of $352,500,000 for the Harry Tracy Water Treatment Plant (HTWTP) Project, as identified in Table 1 above.

In addition to the Budget and Finance Committee's reserve on funds previously appropriated by the full Board of Supervisors under File 10-0337, the Budget and Finance Committee and the full Board of Supervisors also placed a separate and overlapping Controller's reserve on the Harry Tracy Water Treatment Plant (HTWTP) Project, which requires an Environmental Impact Report (EIR) under the California Environmental Quality Act (CEQA), pending adoption of the CEQA findings by the Board of Supervisors.

The PUC is therefore requesting (File 10-1302) that the Board of Supervisors adopt the findings in accordance with CEQA for the Harry Tracy Water Treatment Plant Project. File 10-1302 would also direct the Clerk of the Board of Supervisors to notify the Controller of this action, such that the Controller can remove the overlapping separate reserve on the $304,972,087 previously appropriated by the Board of Supervisors.

Approval of the proposed resolution would result in removal of the Controller's reserve on $304,972,087, such that no funds will remain on Controller's reserve. Approval of the requested release of $298,408,678 from the separate Budget and Finance Committee reserve would leave a remaining balance of $6,563,409 on reserve ($304,972,087 total on reserve less $298,408,678 requested release) on Budget and Finance Committee reserve. Mr. Jacobo noted that while the PUC does not currently anticipate requesting release of the $6,563,409 which would remain on Budget and Finance Committee reserve for the HTWTP Project, the PUC may request such funds be released from reserve at a later date to pay for unanticipated WSIP project cost increases in the future.

The Budget and Legislative Analyst notes that the agenda for the Budget and Finance Committee meeting on November 3, 2010 includes a proposed resolution to approve a settlement agreement between Skyline Stables Corporation and the PUC (Item 6, File 10-1357). According to Mr. Jacobo, the terms of the settlement would impact the requested approval of EIR findings. However, because consideration of such a settlement is scheduled to occur in closed session, the terms of such a settlement are not included in this report. Mr. Jacobo noted that the $650,000 cost of the related settlement is included under the $3,047,655 in remaining Project Management costs shown in Table 1 above.

POLICY CONSIDERATION

The actual construction costs will not be known until after the PUC receives construction bids, which are currently due on December 9, 2010

The Budget and Legislative Analyst notes the Board of Supervisors could continue the requested release of reserve funds until after the PUC receives the construction bids for the HTWTP Project, which are currently due on December 9, 2010. If the subject request is continued until late December, 2010 or early January of 2011, the actual amount to be released would then match the actual award of the construction contract (including a contingency), plus the remaining non-construction costs of $19,153,678 (the total requested release amount of $298,408,678 less $279,255,000 in estimated additional needed construction costs as shown in Table 1 above), rather than being based on an estimate of the costs as provided by the PUC.

However, according to Mr. Jacobo, continuing the subject request could result in delays to the HTWTP Project due to (a) potential extensions in the current December 9, 2010 construction bid deadline[1] and (b) the holiday season in December when the Board of Supervisors may not be in session. Mr. Jacobo advises that the PUC wants to award a construction contract for the HTWTP Project in late December 2010, in order to maintain the project's schedule.

As such, the Budget and Legislative Analyst instead recommends replacing the Budget and Finance Committee reserve on the requested $298,408,678 with a Controller's reserve, and instructing the Controller, after receiving supporting documentation from the PUC, to release the amount of construction funds equal to the lowest responsive construction bid received by the PUC, plus a ten percent construction contingency[2]. The Budget and Legislative Analyst also recommends releasing the remaining needed amount of $19,153,678 for non-construction costs (the total requested release amount of $298,408,678 less $279,255,000 in estimated additional needed construction costs).

The Budget and Legislative Analyst further recommends that the Controller return any remaining funds to a Budget and Finance Committee reserve.

RECOMMENDATIONS

1. Increase the requested release of reserved funds by $7,912,183, from the requested incorrect amount of $290,496,495 to $298,408,678 (File 10-1297).

[1] According to Mr. Jacobo, while an extension of the December 9, 2010 bid deadline is not currently anticipated, other WSIP Project construction contract bid deadlines have been extended due to factors which were unforeseen at the time the deadline was established such as changes to the scope of work.

[2] According to Mr. Jacobo, a ten percent construction contingency is the standard construction contingency included in all WSIP project construction budgets, and that the above-noted $279,255,000 (see Table 1 above) estimated construction cost already includes a ten percent contingency.

2. Replace the existing Budget and Finance Committee reserve on the requested $298,408,678 with a Controller's reserve, and request the Controller, after receiving supporting documentation from the PUC, to release the amount of construction funds equal to the lowest responsive construction bid received by the PUC, plus a ten percent construction contingency.

3. Release the estimated additional needed non-construction amount of $19,153,678 (the total requested release amount of $298,408,678 less $279,255,000 in estimated additional needed construction costs).

4. Request the Controller to return any remaining unneeded funds to a Budget and Finance Committee reserve.

5. Approve the proposed resolution adopting the findings under (CEQA) (File 10-1302).

Harvey M. Rose

cc: Supervisor Avalos
Supervisor Mirkarimi
Supervisor Elsbernd
President Chiu
Supervisor Alioto-Pier
Supervisor Campos
Supervisor Chu
Supervisor Daly
Supervisor Dufty
Supervisor Mar
Supervisor Maxwell
Clerk of the Board
Cheryl Adams
Controller
Greg Wagner

SFPUC
WATER
WASTEWATER
POWER

SAN FRANCISCO PUBLIC UTILITIES COMMISSION

1155 Market St., 11th Floor, San Francisco, CA 94103 • Tel. (415) 554-3155 • Fax (415) 554-3161 • TTY (415) 554.3488

TO: **Angela Calvillo, Clerk of the Board of Supervisors**

FROM: **Nathan Purkiss, 554-3404**

DATE: **10/15/10**

SUBJECT: **Two Items for Introduction, Including a Release Reserve Letter and a Resolution adopting CEQA findings related to the Harry Tracy Water Treatment Plant**

Please find the original and 4 copies of two items for introduction, including 1) release reserve letter and 2) Board of Supervisors resolution; both relating to the Harry Tracy Water Treatment Plant (HTWTP) long term improvements project, as well as supplemental materials. The entire packet includes:

1. Letter requesting a release of reserve funds for $290,496,495 for WSIP Project CUW367 HTWTP Long Term Improvement.
2. Board of Supervisor's Resolution adopting CEQA findings for Project CUW367 HTWTP Long Term Improvement.
3. Signed copy of SFPUC Commission Resolution 10-0176, and the SFPUC Agenda Item related to this resolution.
4. Draft EIR for Project CUW367 HTWTP Long Term Improvement.
5. Comments and Responses to Draft EIR
6. Attachment A HTWTP CEQA Findings
7. Attachment B HTWTP Mitigated Monitoring and Reporting Program

Please schedule these two items together for the Budget and Finance Committee, and contact us if you need any additional information on these items.

Departmental representative to receive a copy of the adopted resolution:

Name: Nathan Purkiss Phone: 554-3404

Interoffice Mail Address: 1155 Market Street, 11th Floor

PUBLIC UTILITIES COMMISSION

City and County of San Francisco

RESOLUTION NO. **10-0176**

WHEREAS, The San Francisco Public Utilities Commission (SFPUC) staff have developed a project description under the Water System Improvement Program (WSIP) for the improvements to the regional water supply system, otherwise known as Project No. CUW36701, Harry Tracy Water Treatment Plant (HTWTP) Long-Term Improvements Project (Project); and

WHEREAS, The objectives of the Project are to support the facility's role within the SFPUC regional water system with respect to water quality, seismic response, and delivery reliability through the year 2030, and to produce adequate water supply to meet water delivery needs in the service area through the year 2018, while maximizing the use of existing SFPUC facilities and infrastructure, maintaining a gravity-driven system, and allowing for timely construction of proposed facilities. Further, the proposed project aims to improve water treatment in the Peninsula region by ensuring that locally stored water is potable, improving delivery reliability by installing redundant features, and improving seismic reliability through structural reinforcements and slope stabilization measures; and

WHEREAS, The SFPUC intends to implement a number of design measures under the Project to meet seismic reliability goals of sustaining limited damage following a major seismic event and to be able to deliver 140 mgd within 24 hours of such an earthquake event. After careful evaluation of design alternatives, the design approach of retrofitting and strengthening some of the existing facilities and constructing new relocated facilities onsite is the most reasonable approach from a constructability, economic and public safety standpoint, for the reasons set forth in the September 2010, SFPUC report entitled "Geotechnical Design Rationale for the Design of Improvements for the SFPUC Harry Tracy Water Treatment Plant Long-Term Improvements Project," a copy of which is included in the Project file and incorporated herein by reference; and

WHEREAS, On October 14, 2010, the Planning Commission reviewed and considered the Final Environmental Impact Report (EIR) in Planning Department File No. 2007.1202E, consisting of the Draft EIR and the Comments and Responses document, and found that the contents of said report and the procedures through which the Final EIR was prepared, publicized and reviewed complied with the provisions of the California Environmental Quality Act (CEQA), the CEQA Guidelines and Chapter 31 of the San Francisco Administrative Code and found further that the Final EIR reflects the independent judgment and analysis of the City and County of San Francisco, is adequate, accurate and objective, and that the Comments and Responses document contains no significant revisions to the Draft EIR, and certified the completion of said Final EIR in compliance with CEQA and the CEQA Guidelines in its Motion No. 18197;and

WHEREAS, This Commission has reviewed and considered the information contained in the Final EIR, all written and oral information provided by the Planning Department, the public, relevant public agencies, SFPUC and other experts and the administrative files for the Project and the EIR; and

WHEREAS, The Project and Final EIR files have been made available for review by the SFPUC and the public in File No. 2007.1202E, at 1650 Mission Street, Fourth Floor, San Francisco, California; and those files are part of the record before this Commission; and

WHEREAS, The Project is an improvement facility project approved by the SFPUC as part of the WSIP; and

WHEREAS, A Final Programmatic Environmental Impact Report (PEIR) was prepared for the WSIP and certified by the Planning Commission on October 30, 2008, by Motion No. 17734; and

WHEREAS, Thereafter, the SFPUC approved the WSIP and adopted findings and a Mitigation Monitoring and Reporting Program as required by CEQA on October 30, 2008, by Resolution No. 08-200; and

WHEREAS, The Final EIR prepared for the Project is tiered from the PEIR, as authorized by and in accordance with CEQA and the CEQA Guidelines; and

WHEREAS, The PEIR has been made available for review by the SFPUC and the public, and is part of the record before this Commission; and

WHEREAS, SFPUC staff prepared proposed findings, as required by CEQA, (CEQA Findings) and a proposed Mitigation, Monitoring and Reporting Program (MMRP), which material was made available to the public and the Commission for the Commission's review, consideration and action; and

WHEREAS, The Project may require the SFPUC General Manager to apply for and execute various necessary permits, consents and encroachment permits with CalTrans, San Mateo County, City of Millbrae, and City of San Bruno (collectively, Local Agencies) and those permits shall be consistent with SFPUC existing fee or easement interests, where applicable; and

WHEREAS, The SFPUC has issued easements, leases, permits, or licenses to certain parties to use for various purposes portions of City and County of San Francisco (City) owned property along the SFPUC right-of-way where the Project work will occur, and in some instances other parties hold property rights or interests on lands on, along, over, under, adjacent to or in the vicinity of the right-of-way, and it may be necessary for the General Manager, or his designee, to (a) exercise rights under any such deed, easement, lease, permit, or license or (b) negotiate and execute new or amended easements, leases, permits, licenses, or encroachment removal or other project related agreements or consents (each, a Use Instrument) with owners or occupiers of property interests or utility facilities or improvements on, along, over, under, adjacent to or in the vicinity of, City property with respect to uses and structures, fences, and other above-ground or subterranean improvements or interests, orchards, trees, or other vegetation, or to implement Project mitigation measures or accommodate Project construction activities and schedule; and

WHEREAS, The SFPUC, on April 25, 2006 adopted Resolution 06-0069 approving a lease agreement between the City and Skyline Stables Corporation (Lease) for a horse stabling operation on a portion of the 55.63 acre tract of land also known as the Harry Tracy Water Treatment Plant, said portion containing 13.2 acres, more or less, as shown on the Exhibit B to

the Lease (Premises), subject to the Rights Reserved to City with respect to the Lease Premises "to use, operate, maintain, repair, enlarge, modify, expand, replace and reconstruct the SFPUC Facilities; " and

WHEREAS, Notwithstanding the best efforts of the SFPUC to achieve the WSIP and Project objectives in a manner that would not disturb the Skyline Stables Corporation use of the Lease Premises, in order for the Project to proceed as herein approved, the General Manager will have to exercise rights under the Lease as necessary to implement the Project. The General Manager may also, in compliance with Government Code Section 7260 et seq., undertake the process for possible acquisition of an interest in real property pertaining to that Lease held by Skyline Stables Corporation, if any. Given the critical nature of the public safety improvements that will be achieved through the Project, it is in the public interest to grant the General Manager authority to negotiate and execute agreements with Skyline Stables Corporation, its shareholders, subtenants and licensees, as necessary, to secure possession of the SFPUC property to expedite implementation of the Project, subject to Board of Supervisors approval, if required; provided, however, any such agreements must be consistent with SFPUC plans and policies, and all applicable laws; and

WHEREAS, Implementation of the Project will involve consultation with, or required approvals by, state and federal regulatory agencies, including but not limited to the following: U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Department of Transportation, California Department of Fish and Game, San Francisco Bay Regional Water Quality Control Board, and Bay Area Air Quality Management District (collectively, Regulatory Agencies); now, therefore, be it

RESOLVED, This Commission has reviewed and considered the Final EIR, finds that the Final EIR is adequate for its use as the decision-making body for the actions taken herein, and hereby adopts the CEQA Findings, including the Statement of Overriding Considerations, attached hereto as Attachment A and incorporated herein as part of this Resolution by this reference thereto, and adopts the MMRP attached to this Resolution as Attachment B and incorporated herein as part of this Resolution by this reference thereto, and authorizes a request to the Board of Supervisors to adopt the same CEQA Findings, Statement of Overriding Considerations and MMRP; and be it

FURTHER RESOLVED, That this Commission hereby approves Project No. CUW36701, Harry Tracy Water Treatment Plant Long-Term Improvements Project and authorizes SFPUC staff to proceed with actions necessary to implement the Project consistent with this Resolution, including advertising for construction bids, provided, however, that staff will return to seek Commission approval for award of construction contract(s); and be it,

FURTHER RESOLVED, The General Manager will confer with the Commission during the negotiation process on real estate agreements and financial assurances, as necessary, and report to the Commission on all agreements submitted to the Board of Supervisors for approval. Notwithstanding the authority granted to the General Manager by this Resolution, the General Manager is not authorized to dispose of any right-of-way or other SFPUC interest in real property, in any manner, including by sale, trade or transfer, without approval by the SFPUC pursuant to Charter Section 8B124; and be it

FURTHER RESOLVED, That this Commission authorizes the General Manager, or his designee, to apply for and execute various necessary permits, encroachment permits or other agreements, with CalTrans and Local Agencies, which shall be consistent with SFPUC's existing fee or easement interests, where applicable. To the extent that the terms and conditions of the permits will require SFPUC to indemnify the respective jurisdictions, those indemnity obligations are subject to review and approval by the San Francisco Risk Manager. The General Manager is authorized to agree to such terms and conditions, including but not limited to those relating to maintenance, repair and relocation of improvements, that are in the public interest, and in the judgment of the General Manager, in consultation with the City Attorney, are reasonable and appropriate for the scope and duration of the requested use as necessary for the Project; and be it

FURTHER RESOLVED, That this Commission authorizes the General Manager, or his designee, to exercise any right as necessary under any deed or Use Instrument and negotiate and execute new or amended Use Instruments, if necessary for the Project and subject to any applicable approvals, with owners or occupiers of property interests or utility facilities or improvements on, along, over, under, adjacent to, or in the vicinity of the SFPUC right-of-way, in a form that the General Manager determines is in the public interest and is acceptable, necessary, and advisable to accommodate Project construction activities and schedule, carry out Project-related mitigation measures, and to otherwise effectuate the purposes and intent of this Resolution, in compliance with the Charter and all applicable laws, and in such form approved by the City Attorney; and be it

FURTHER RESOLVED, That this Commission authorizes the General Manager, or his designee, to exercise any right under the Lease between the City and Skyline Stables Corporation as necessary to implement the Project, including but not limited to the Rights Reserved to City with respect to the Lease Premises "to use, operate, maintain, repair, enlarge, modify, expand, replace and reconstruct the SFPUC Facilities." The General Manager may also, in compliance with Government Code Section 7260 et seq., undertake the process for possible acquisition of an interest in real property pertaining to that Lease held by Skyline Stables Corporation, if any. Given the critical nature of the public safety improvements that will be achieved through the Project, this Commission grants the General Manager authority to negotiate and execute agreements with Skyline Stables Corporation, its shareholders, subtenants and licensees, as necessary, to secure possession of the SFPUC property to expedite implementation of the Project, subject to Board of Supervisors approval, if required; provided, however, any such agreements must be consistent with SFPUC plans and policies, in compliance with the Charter and all applicable laws, and in such form approved by the City Attorney; and be it

FURTHER RESOLVED, That this Commission authorizes the General Manager, or his designee, to consult with, or apply for, and, if necessary, seek Board of Supervisors' approval, and if approved, to accept and execute permits or required approvals, and to execute such other agreements as may be necessary to implement permit terms and conditions or otherwise comply with the regulatory requirements of the Regulatory Agencies, including terms and conditions that are within the lawful authority of the agency to impose, in the public interest, and, in the judgment of the General Manager, in consultation with the City Attorney, are reasonable and appropriate for the scope and duration of the requested permit or approval, as necessary for the Project; and be it

FURTHER RESOLVED, That this Commission authorizes the General Manager, or his designee, to enter into any subsequent additions, amendments or other modifications to the permits, licenses, encroachment removal agreements, leases, easements, and other Use Instruments, real property agreements, financial assurances, transmission agreements, memorandum of agreements, or amendments thereto, as described herein, that the General Manager, in consultation with the City Attorney, determines are in the best interests of the SFPUC and the City, do not materially decrease the benefits to the SFPUC or the City, and do not materially increase the obligations or liabilities of the SFPUC or the City, subject to Board of Supervisors' approval, where required, such determination to be conclusively evidenced by the execution and delivery of any such additions, amendments, or other modifications.

I hereby certify that the foregoing resolution was adopted by the Public Utilities Commission at its meeting of October 15, 2010

Secretary, Public Utilities Commission

101302

AGENDA ITEM
Public Utilities Commission
City and County of San Francisco

DEPARTMENT Infrastructure AGENDA NO. 13

MEETING DATE October 15, 2010

Approve Project: Regular Calendar
Julie Labonte

Project No. CUW36701, Approve Project, Harry Tracy Water Treatment Plant Long-Term Improvements Project

Summary of Proposed Commission Action:	**Approve** Water Enterprise, Water System Improvement Program (WSIP) Project No. CUW36701, Harry Tracy Water Treatment Plant (HTWTP) Long-Term Improvements Project (Project); **adopt** the required California Environmental Quality Act (CEQA) findings, including a Statement of Overriding Considerations, and the Mitigation Monitoring and Reporting Program (MMRP); and **authorize** the General Manager to implement the Project, in compliance with the Charter and applicable law, and subject to Board of Supervisors approval where required, including the following: 1. Obtain from the California Department of Transportation, San Mateo County, City of Millbrae and City of San Bruno, as necessary, encroachment permits, consents, or other permits for temporary construction activities. 2. Exercise any City or San Francisco Public Utilities Commission (SFPUC or Commission) right under any deed, easement, lease, permit, or license as necessary, and negotiate and execute with owners or occupiers of property interests or utility facilities or improvements on, along, over, under, adjacent to, or in the vicinity of the SFPUC's right-of-way, new or amended easement, lease, permit, license, encroachment-removal or other project related agreements, if necessary for the Project. This authorization includes the authority to exercise any rights under that Lease Agreement between the City and County of San Francisco (City) and Skyline Stables Corporation (Tenant), approved by SFPUC Resolution 06-0069, (Lease) including but not limited to the Rights Reserved to City with respect to the Lease Premises "to use, operate, maintain, repair, enlarge, modify,

APPROVAL:

DEPARTMENT / BUREAU		FINANCE	Todd L. Rydstrom
COMMISSION SECRETARY	Mike Housh	GENERAL MANAGER	Ed Harrington for

	expand, replace and reconstruct the SFPUC Facilities," as necessary to implement the Project. The General Manager may also, in compliance with Government Code Section 7260 et seq., undertake the process for possible acquisition of an interest in real property pertaining to that Lease held by Skyline Stables Corporation, if any. The General Manager is also authorized to negotiate and execute agreements with Skyline Stables Corporation, its shareholders, subtenants and licensees, as necessary, to secure possession of the SFPUC property to expedite implementation of the Project, subject to Board of Supervisors approval, if required; provided, however, any such agreements must be consistent with SFPUC plans and policies, and all applicable laws. 3. Obtain permits or approvals from, or enter into other agreements with state and federal regulatory agencies, including but not limited to: U.S. Army Corps of Engineers, State Historic Preservation Officer, U.S. Fish & Wildlife Service, National Marine Fisheries Service, California Department of Fish and Game, San Francisco Regional Water Quality Control Board, California Department of Toxic and Substance Control, and Bay Area Air Quality Management District, and enter into agreements with third parties as necessary to implement conditions of those permits or approvals. Notwithstanding the authority granted to the General Manager by this Resolution, the General Manager is not authorized to dispose of any real property, in any manner, including by sale, trade or transfer, without approval by the SFPUC pursuant to Charter Section 8B124 Implementation actions will include advertising for construction bids for the project. However, the Commission will confirm award of construction contract(s) at a future date.
Background:	The Project is one of the key regional projects to be completed as part of the WSIP. Approval of these actions will allow the SFPUC to proceed with public safety improvements to the regional water system that will increase the system's overall seismic reliability, delivery reliability, and water supply reliability for the regional water system. The HTWTP is located on 52.3 acres in an unincorporated area of San Mateo County. A small portion of the site is within the City of Millbrae. The HTWTP is an important component of the SFPUC regional water system providing treatment of raw water from the San Andreas Reservoir to serve SFPUC customers in northern San Mateo County and San Francisco. Originally constructed in 1972, the HTWTP was expanded in 1987 and 1992 to provide a sustained treatment capacity of 180 mgd. However, due to decreased raw water

	quality and hydraulic limitations, the plant is currently unable to achieve its maximum-rated capacity to meet the WSIP delivery reliability goal, or a sustained treatment capacity of 140 mgd after an earthquake to meet the WSIP seismic reliability goals. Additionally, a seismic assessment determined that several structural and slope stabilization measures are needed for the plant to meet the WSIP seismic reliability goals. The Project would implement treatment process improvements and other upgrades to the plant such as pipeline distribution, access, and site improvements. The treatment process would generally be the same. The primary differences would be with the solids handling, whereby solids from the sludge holding tank would be transferred to a solids dewatering facility before being trucked off site, and with the treated water storage, which would occur in a single new tank north of the main plant site instead of two tanks southeast of the main plant. The construction project should be completed within four years of the commencement of construction. The primary goal of the proposed project is to support the facility's role within the SFPUC regional water system with respect to water quality, seismic response, and delivery reliability through the year 2030, and to produce adequate water supply to meet water delivery needs in the service area through the year 2018. Further, the proposed project aims to improve water treatment in the Peninsula region by ensuring that locally stored water is potable, improving delivery reliability by installing redundant features, and improving seismic reliability through structural reinforcements and slope stabilization measures. The specific objectives of the proposed project include the following: • Increase water delivery reliability; • Improve seismic reliability; • Maximize the use of existing SFPUC facilities and infrastructure; • Maintain a gravity-driven system; and • Allow for timely construction of proposed facilities. The WSIP identifies the HTWTP as a key facility for meeting WSIP level-of-service goals. The project would enable the HTWTP to fulfill its role as an important component of the SFPUC regional water system and contribute to system-wide achievement of WSIP level-of-

	service goals. The Project objectives relate directly to the following WSIP goals and objectives (SFPUC Resolution No. 08-200): • *Seismic Reliability*. Deliver basic service to the three regions in the service area within 24 hours after a major earthquake and restore facilities to meet average-day demand within 30 days after a major earthquake. • *Delivery Reliability*. Provide operational flexibility to allow planned maintenance shutdowns of individual facilities without interrupting customer service; provide operational flexibility to minimize the risk of service interruption from unplanned facility upsets or outages; provide operational flexibility and system capacity to replenish local reservoirs as needed; and meet the estimated average annual demand under the conditions of one planned shutdown of a major facility for maintenance concurrent with one unplanned facility outage. • *Water Quality*. Design improvements to meet current and foreseeable future federal and state water quality requirements, provide clean, unfiltered water originating from Hetch Hetchy Reservoir and filter all other surface water sources and continue to implement watershed protection measures. • *Water Supply Reliability*. Meet dry-year delivery needs while limiting rationing to a maximum 20 percent system-wide reduction in water service during extended droughts.
Result of Inaction:	The SFPUC will not be able to proceed with plans to implement the Project. This will restrict the SFPUC's ability to reliably meet customer demands after a major seismic event, during a drought, or during major maintenance activities. The HTWTP would not meet SFPUC's WSIP level of service objectives for this facility, and the plant would continue to be unable to achieve its designed sustained treatment capacity of 140 mgd after an earthquake to meet the WSIP seismic reliability goals. The structural reinforcements and slope stabilization measures would not be authorized.
Description of Project Action:	1. In order to move forward with the Project, the Commission must review and consider the certified Final Environmental Impact Report

	(EIR), and adopt the Project CEQA Findings, including the Statement of Overriding Considerations, and the MMRP. The Final EIR was provided to each member of the Commission. The Final EIR was prepared by the San Francisco Planning Department. The Final EIR identified and analyzed Project-specific significant impacts and found potentially significant impacts within the resource areas of aesthetics, cultural and paleontological resources, transportation and circulation, noise and vibration, air quality and climate change, utilities and service systems, biological resources, geology and soils, hydrology and water quality, hazards and hazardous materials, and cumulative impacts. Potentially significant impacts will be reduced to a less than significant level by implementing the mitigation measures in the Final EIR and the MMRP during the design, construction, and post-construction phases, except for those potentially significant and unavoidable impacts caused by the Project and identified in the Final EIR. These potentially significant and unavoidable impacts include: • Temporary increase in traffic load on roadways caused by construction-related vehicle trips and resultant impact on roadway level of service during construction (only during AM peak hour at the intersection of I-280 on-and off-ramps at Cunningham Drive) • Temporary increase in ambient noise levels on and around the project area during construction (only for relining the Sunset Branch pipeline) • Exposure of people to or generation of noise levels in excess of local standards established in the local general plan or noise ordinance, or applicable standards of other agencies during construction (only for relining the Sunset Branch pipeline) • Construction emissions of criteria pollutants • Cumulative traffic increases on local and regional roads • Cumulative increases in noise • Cumulative increases in emissions in the region The Project is also a component of the WSIP and will contribute to the significant and unavoidable water supply impacts of the WSIP. Those significant and unavoidable impacts include: • Indirect growth inducement impacts in the SFPUC service area;

	• Potential effects on water flow along the Alameda Creek below the Alameda Creek Diversion Dam; (NOTE: The Calaveras Dam Replacement Project CEQA analysis has indicated that this impact is no longer considered significant and unavoidable; because the Final EIR for Calaveras has not yet been certified, SFPUC still conservatively assumes that this impact continues to be significant and unavoidable as the WSIP Programmatic Environmental Impact Report (PEIR) originally concluded.) • Fisheries (Upper and Lower Crystal Springs Reservoir): Effects in the Peninsula watershed on fishery resources in Crystal Springs Reservoir in San Mateo County (NOTE: The Lower Crystal Springs Dam Improvements Project CEQA analysis has indicated that this impact is no longer considered significant and unavoidable; because the Final EIR for LCSDI was not scheduled for a Planning Commission determination on the certification of that Final EIR until October 7, 2010, SFPUC still conservatively assumed that this impact continues to be significant and unavoidable as the WSIP PEIR originally concluded.) The CEQA Findings contain a Statement of Overriding Considerations justifying Project approval notwithstanding the potential for significant and unavoidable impacts, as authorized by CEQA. The CEQA Findings and MMRP are attached as Attachments A and B, respectively, to the Commission Resolution for this agenda item. 2. Upon approval of the Project, SFPUC staff will proceed to implement the Project, including advertising for construction bids and obtaining necessary agreements and permits. Staff will seek Commission approval to award of construction contract(s) at a future date. 3. The Project may require that the SFPUC seek permits, consents and/or other agreements from CalTrans, San Mateo County, City of Millbrae, and City of San Bruno for various permits for temporary construction activities in or around local roadways. These permits shall be consistent with SFPUC existing fee or easement interests, where applicable. To the extent that the terms and conditions of the required permits or instruments will require SFPUC to indemnify other parties, those indemnity obligations are subject to review and approval by the San Francisco Risk Manager. The Commission Resolution will authorize the General Manager to agree to such other terms and conditions (e.g. maintenance, repair, and relocation of improvements) that are in the public interest, are consistent with the

	SFPUC's existing rights, and in the judgment of the General Manager, in consultation with the City Attorney, are reasonable and appropriate for the scope and duration of the requested use. 4. For portions of the City-owned SFPUC right-of-way where the Project work will occur, the SFPUC has issued easements, leases, permits, or licenses to certain parties to use the right-of-way for various purposes, and in some instances other parties hold property rights or interests on lands along, over, under, adjacent to or in the vicinity of the right-of-way that may be affected by the Project. The Resolution authorizes the General Manager, or his designee, to: (i) exercise any City or SFPUC right under any deed, easement, lease, permit, or license as necessary or advisable in connection with the Project; and (ii) negotiate and execute with owners or occupiers of property interests or utility facilities or improvements, on, along, over, under, adjacent to or in the vicinity of, the SFPUC's right-of-way, new or amended easements, leases, permits, licenses, encroachment removal or other project related agreements (each, a Use Instrument) with respect to uses and structures, fences, and other above-ground or subterranean improvements or interests, orchards, trees, or other vegetation. The General Manager's authority so granted will include the authority, if necessary for the Project, to enter into, amend, or exercise rights under existing or new Use Instruments with any owner or occupier of property on, along, over, under, adjacent to or in the vicinity of the SFPUC right-of-way, including Use Instruments required to accommodate project construction activities or schedule, or to implement Project mitigation measures. Any such new or amended Use Instrument will be in a form that the General Manager determines is in the public interest and is acceptable, necessary, and advisable to effectuate the purposes and intent of this Commission Resolution, and in compliance with the Charter and all applicable laws, and approved as to form by the City Attorney. 5. Implementation of the Project may involve consultation with, or required approvals by, state and federal regulatory agencies, including but not limited to the following: U.S. Army Corps of Engineers, State Historic Preservation Officer, U.S. Fish & Wildlife Service, National Marine Fisheries Service, California Department of Fish and Game, San Francisco Regional Water Quality Control Board, California Department of Toxic and Substance Control, and Bay Area Air Quality Management District (collectively Regulatory Agencies). The Resolution authorizes the General Manager to apply for, and if necessary, seek Board of Supervisors' approval, and, if approved, accept and execute required approvals by these Regulatory Agencies, and to negotiate and execute agreements with third parties as necessary to comply with or implement the conditions of approval

	imposed by those Agencies. To the extent that the terms and conditions of the required approvals, or related agreements, will require SFPUC to indemnify other parties, those indemnity obligations are subject to review and approval by the San Francisco Risk Manager. The Resolution authorizes the General Manager to agree to such terms and conditions that are within the lawful authority of the agency to impose, in the public interest, and, in the judgment of the General Manager, in consultation with the City Attorney, are reasonable and appropriate for the scope and duration of the required approval, as necessary for the Project.
Environmental Review:	The San Francisco Planning Commission certified a Final EIR for Project No. CUW36701, on October 14, 2010.
Recommendation:	SFPUC staff recommends that the Commission adopt the attached resolution.
Attachments:	1. SFPUC Resolution 2. Attachment A: CEQA Findings 3. Attachment B: Mitigation Monitoring and Reporting Program (MMRP)

PUBLIC UTILITIES COMMISSION

City and County of San Francisco

RESOLUTION NO. _____

WHEREAS, The San Francisco Public Utilities Commission (SFPUC) staff have developed a project description under the Water System Improvement Program (WSIP) for the improvements to the regional water supply system, otherwise known as Project No. CUW36701, Harry Tracy Water Treatment Plant (HTWTP) Long-Term Improvements Project (Project); and

WHEREAS, The objectives of the Project are to support the facility's role within the SFPUC regional water system with respect to water quality, seismic response, and delivery reliability through the year 2030, and to produce adequate water supply to meet water delivery needs in the service area through the year 2018, while maximizing the use of existing SFPUC facilities and infrastructure, maintaining a gravity-driven system, and allowing for timely construction of proposed facilities. Further, the proposed project aims to improve water treatment in the Peninsula region by ensuring that locally stored water is potable, improving delivery reliability by installing redundant features, and improving seismic reliability through structural reinforcements and slope stabilization measures; and

WHEREAS, The SFPUC intends to implement a number of design measures under the Project to meet seismic reliability goals of sustaining limited damage following a major seismic event and to be able to deliver 140 mgd within 24 hours of such an earthquake event. After careful evaluation of design alternatives, the design approach of retrofitting and strengthening some of the existing facilities and constructing new relocated facilities onsite is the most reasonable approach from a constructability, economic and public safety standpoint, for the reasons set forth in the September 2010, SFPUC report entitled "Geotechnical Design Rationale for the Design of Improvements for the SFPUC Harry Tracy Water Treatment Plant Long-Term Improvements Project," a copy of which is included in the Project file and incorporated herein by reference; and

WHEREAS, On October 14, 2010, the Planning Commission reviewed and considered the Final Environmental Impact Report (EIR) in Planning Department File No. 2007.1202E, consisting of the Draft EIR and the Comments and Responses document, and found that the contents of said report and the procedures through which the Final EIR was prepared, publicized and reviewed complied with the provisions of the California Environmental Quality Act (CEQA), the CEQA Guidelines and Chapter 31 of the San Francisco Administrative Code and found further that the Final EIR reflects the independent judgment and analysis of the City and County of San Francisco, is adequate, accurate and objective, and that the Comments and Responses document contains no significant revisions to the Draft EIR, and certified the completion of said Final EIR in compliance with CEQA and the CEQA Guidelines in its Motion No. _____;and

WHEREAS, This Commission has reviewed and considered the information contained in the Final EIR, all written and oral information provided by the Planning Department, the public, relevant public agencies, SFPUC and other experts and the administrative files for the Project and the EIR; and

WHEREAS, The Project and Final EIR files have been made available for review by the SFPUC and the public in File No. 2007.1202E, at 1650 Mission Street, Fourth Floor, San Francisco, California; and those files are part of the record before this Commission; and

WHEREAS, The Project is an improvement facility project approved by the SFPUC as part of the WSIP; and

WHEREAS, A Final Programmatic Environmental Impact Report (PEIR) was prepared for the WSIP and certified by the Planning Commission on October 30, 2008, by Motion No. 17734; and

WHEREAS, Thereafter, the SFPUC approved the WSIP and adopted findings and a Mitigation Monitoring and Reporting Program as required by CEQA on October 30, 2008, by Resolution No. 08-200; and

WHEREAS, The Final EIR prepared for the Project is tiered from the PEIR, as authorized by and in accordance with CEQA and the CEQA Guidelines; and

WHEREAS, The PEIR has been made available for review by the SFPUC and the public, and is part of the record before this Commission; and

WHEREAS, SFPUC staff prepared proposed findings, as required by CEQA, (CEQA Findings) and a proposed Mitigation, Monitoring and Reporting Program (MMRP), which material was made available to the public and the Commission for the Commission's review, consideration and action; and

WHEREAS, The Project may require the SFPUC General Manager to apply for and execute various necessary permits, consents and encroachment permits with CalTrans, San Mateo County, City of Millbrae, and City of San Bruno (collectively, Local Agencies) and those permits shall be consistent with SFPUC existing fee or easement interests, where applicable; and

WHEREAS, The SFPUC has issued easements, leases, permits, or licenses to certain parties to use for various purposes portions of City and County of San Francisco (City) owned property along the SFPUC right-of-way where the Project work will occur, and in some instances other parties hold property rights or interests on lands on, along, over, under, adjacent to or in the vicinity of the right-of-way, and it may be necessary for the General Manager, or his designee, to (a) exercise rights under any such deed, easement, lease, permit, or license or (b) negotiate and execute new or amended easements, leases, permits, licenses, or encroachment removal or other project related agreements or consents (each, a Use Instrument) with owners or occupiers of property interests or utility facilities or improvements on, along, over, under, adjacent to or in the vicinity of, City property with respect to uses and structures, fences, and other above-ground or subterranean improvements or interests, orchards, trees, or other vegetation, or to implement Project mitigation measures or accommodate Project construction activities and schedule; and

WHEREAS, The SFPUC, on April 25, 2006 adopted Resolution 06-0069 approving a lease agreement between the City and Skyline Stables Corporation (Lease) for a horse stabling operation on a portion of the 55.63 acre tract of land also known as the Harry Tracy Water Treatment Plant, said portion containing 13.2 acres, more or less, as shown on the Exhibit B to

the Lease (Premises), subject to the Rights Reserved to City with respect to the Lease Premises "to use, operate, maintain, repair, enlarge, modify, expand, replace and reconstruct the SFPUC Facilities; " and

WHEREAS, Notwithstanding the best efforts of the SFPUC to achieve the WSIP and Project objectives in a manner that would not disturb the Skyline Stables Corporation use of the Lease Premises, in order for the Project to proceed as herein approved, the General Manager will have to exercise rights under the Lease as necessary to implement the Project. The General Manager may also, in compliance with Government Code Section 7260 et seq., undertake the process for possible acquisition of an interest in real property pertaining to that Lease held by Skyline Stables Corporation, if any. Given the critical nature of the public safety improvements that will be achieved through the Project, it is in the public interest to grant the General Manager authority to negotiate and execute agreements with Skyline Stables Corporation, its shareholders, subtenants and licensees, as necessary, to secure possession of the SFPUC property to expedite implementation of the Project, subject to Board of Supervisors approval, if required; provided, however, any such agreements must be consistent with SFPUC plans and policies, and all applicable laws; and

WHEREAS, Implementation of the Project will involve consultation with, or required approvals by, state and federal regulatory agencies, including but not limited to the following: U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Department of Transportation, California Department of Fish and Game, San Francisco Bay Regional Water Quality Control Board, and Bay Area Air Quality Management District (collectively, Regulatory Agencies); now, therefore, be it

RESOLVED, This Commission has reviewed and considered the Final EIR, finds that the Final EIR is adequate for its use as the decision-making body for the actions taken herein, and hereby adopts the CEQA Findings, including the Statement of Overriding Considerations, attached hereto as Attachment A and incorporated herein as part of this Resolution by this reference thereto, and adopts the MMRP attached to this Resolution as Attachment B and incorporated herein as part of this Resolution by this reference thereto, and authorizes a request to the Board of Supervisors to adopt the same CEQA Findings, Statement of Overriding Considerations and MMRP; and be it

FURTHER RESOLVED, That this Commission hereby approves Project No. CUW36701, Harry Tracy Water Treatment Plant Long-Term Improvements Project and authorizes SFPUC staff to proceed with actions necessary to implement the Project consistent with this Resolution, including advertising for construction bids, provided, however, that staff will return to seek Commission approval for award of construction contract(s); and be it,

FURTHER RESOLVED, The General Manager will confer with the Commission during the negotiation process on real estate agreements and financial assurances, as necessary, and report to the Commission on all agreements submitted to the Board of Supervisors for approval. Notwithstanding the authority granted to the General Manager by this Resolution, the General Manager is not authorized to dispose of any right-of-way or other SFPUC interest in real property, in any manner, including by sale, trade or transfer, without approval by the SFPUC pursuant to Charter Section 8B124; and be it

FURTHER RESOLVED, That this Commission authorizes the General Manager, or his designee, to apply for and execute various necessary permits, encroachment permits or other agreements, with CalTrans and Local Agencies, which shall be consistent with SFPUC's existing fee or easement interests, where applicable. To the extent that the terms and conditions of the permits will require SFPUC to indemnify the respective jurisdictions, those indemnity obligations are subject to review and approval by the San Francisco Risk Manager. The General Manager is authorized to agree to such terms and conditions, including but not limited to those relating to maintenance, repair and relocation of improvements, that are in the public interest, and in the judgment of the General Manager, in consultation with the City Attorney, are reasonable and appropriate for the scope and duration of the requested use as necessary for the Project; and be it

FURTHER RESOLVED, That this Commission authorizes the General Manager, or his designee, to exercise any right as necessary under any deed or Use Instrument and negotiate and execute new or amended Use Instruments, if necessary for the Project and subject to any applicable approvals, with owners or occupiers of property interests or utility facilities or improvements on, along, over, under, adjacent to, or in the vicinity of the SFPUC right-of-way, in a form that the General Manager determines is in the public interest and is acceptable, necessary, and advisable to accommodate Project construction activities and schedule, carry out Project-related mitigation measures, and to otherwise effectuate the purposes and intent of this Resolution, in compliance with the Charter and all applicable laws, and in such form approved by the City Attorney; and be it

FURTHER RESOLVED, That this Commission authorizes the General Manager, or his designee, to exercise any right under the Lease between the City and Skyline Stables Corporation as necessary to implement the Project, including but not limited to the Rights Reserved to City with respect to the Lease Premises "to use, operate, maintain, repair, enlarge, modify, expand, replace and reconstruct the SFPUC Facilities." The General Manager may also, in compliance with Government Code Section 7260 et seq., undertake the process for possible acquisition of an interest in real property pertaining to that Lease held by Skyline Stables Corporation, if any. Given the critical nature of the public safety improvements that will be achieved through the Project, this Commission grants the General Manager authority to negotiate and execute agreements with Skyline Stables Corporation, its shareholders, subtenants and licensees, as necessary, to secure possession of the SFPUC property to expedite implementation of the Project, subject to Board of Supervisors approval, if required; provided, however, any such agreements must be consistent with SFPUC plans and policies, in compliance with the Charter and all applicable laws, and in such form approved by the City Attorney; and be it

FURTHER RESOLVED, That this Commission authorizes the General Manager, or his designee, to consult with, or apply for, and, if necessary, seek Board of Supervisors' approval, and if approved, to accept and execute permits or required approvals, and to execute such other agreements as may be necessary to implement permit terms and conditions or otherwise comply with the regulatory requirements of the Regulatory Agencies, including terms and conditions that are within the lawful authority of the agency to impose, in the public interest, and, in the judgment of the General Manager, in consultation with the City Attorney, are reasonable and appropriate for the scope and duration of the requested permit or approval, as necessary for the Project; and be it

FURTHER RESOLVED, That this Commission authorizes the General Manager, or his designee, to enter into any subsequent additions, amendments or other modifications to the permits, licenses, encroachment removal agreements, leases, easements, and other Use Instruments, real property agreements, financial assurances, transmission agreements, memorandum of agreements, or amendments thereto, as described herein, that the General Manager, in consultation with the City Attorney, determines are in the best interests of the SFPUC and the City, do not materially decrease the benefits to the SFPUC or the City, and do not materially increase the obligations or liabilities of the SFPUC or the City, subject to Board of Supervisors' approval, where required, such determination to be conclusively evidenced by the execution and delivery of any such additions, amendments, or other modifications.

I hereby certify that the foregoing resolution was adopted by the Public Utilities Commission at its meeting of October 15, 2010

Secretary, Public Utilities Commission

File 101302

ATTACHMENT A

HARRY TRACY WATER TREATMENT PLANT LONG-TERM IMPROVEMENTS 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 Harry Tracy Water Treatment Plant Long-Term Improvements 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 the Project description and objectives, significant impacts, 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. These findings comprise Attachment A to SFPUC Resolution No. 10-0176 ("SFPUC Approval Resolution"), dated October 15, 2010. The SFPUC adopts these findings as part of the SFPUC Approval Resolution and has incorporated these findings therein by reference.

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") containing the mitigation measures that have been proposed for adoption is attached as Attachment B to the SFPUC Approval Resolution. The MMRP is required by CEQA Section 21081.6 and CEQA Guidelines Section 15091. The MMRP 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. The MMRP 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 the MMRP.
These findings are based upon substantial evidence in the entire record before the Commission. The references set forth in these findings refer to certain pages or sections of the Draft Environmental Impact Report ("Draft EIR") 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 SFPUC adopts and implements the Project identified in the Final EIR to upgrade the Harry Tracy Water Treatment Plant ("HTWTP") to meet water quality and delivery reliability goals, improve seismic reliability, and implement other improvements to the HTWTP such as pipeline distribution, access and site improvements. The treatment process would generally be the same even with the proposed improvements. The primary differences would be to solids handling, whereby solids from the sludge holding tank would be transferred to a solids dewatering facility before being trucked off site, and to the treated water storage, which would occur in a single new tank north of the main plant site instead of two tanks southeast of the main plant (see Draft EIR Chapter 3).

B. Project Objectives

The HTWTP is an important component of the SFPUC regional water system providing treatment of raw water from the San Andreas Reservoir to serve SFPUC customers in northern San Mateo County and San Francisco. Originally constructed in 1972, the HTWTP was expanded in 1987 and 1992 to provide a sustained[1] treatment capacity of 180 mgd. However, due to decreased raw water quality and hydraulic limitations, the plant is currently unable to achieve either: (1) its maximum-rated capacity, which would enable the HTWTP to meet the Water System Improvement Program's ("WSIP") delivery reliability goals, or (2) a sustained treatment capacity of 140 mgd after an earthquake to meet the WSIP seismic reliability goals. Additionally, the SFPUC conducted a seismic assessment of the HTWTP and determined that several structural and slope stabilization measures were needed for the plant to meet the WSIP seismic reliability goals (see Final EIR, Chapter 3).

The overall purpose of the Project is to support the facility's role within the SFPUC regional water system with respect to water quality, seismic response, delivery reliability, and water supply.

The specific objectives of the Project include the following:

- Increase water delivery reliability.
- Improve seismic reliability.
- Maximize the use of existing SFPUC facilities and infrastructure.
- Maintain a gravity-driven system.

[1] "Sustained treatment capacity" is defined as the plant capacity when the largest piece of equipment is out of service for each process train, not including physical or passive equipment.

- Allow for timely construction of proposed facilities.

In addition, the Project is part of the SFPUC's Water System Improvement Program ("WSIP") adopted by this Commission on October 30, 2008, by SFPUC 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) upgrade the seismic standards of critical facilities to improve seismic reliability and to reduce the system's vulnerability to earthquakes; (2) improve water delivery reliability under a variety of operating conditions by improving overall operations of the system; and (3) contribute to meeting projected water supply demand through 2018 during both non-drought and drought periods (see Draft EIR Chapter 3).

C. Environmental Review

1. Water System Improvement Project Environmental Impact Report

On October 30, 2008, the SFPUC adopted the regional Water System Improvement Program (the "WSIP"). 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 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 Peninsula Region of the WSIP and is located in San Mateo 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). The PEIR evaluated the environmental impacts of the WSIP's water supply and system operations strategy at a project-level of detail, and it evaluated the environmental impacts of the WSIP's facility improvement projects at a program-level of detail. The PEIR contemplated that additional project-level environmental review would be conducted for the facility improvement projects, including the Project.

2. HTWTP Long-Term Improvements Project 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 implications of the Project were 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, prepared a Notice of Preparation ("NOP") and conducted

scoping meetings for the EIR (see Appendix A of the Draft EIR). The NOP was circulated to local, state, and federal agencies and to other interested parties on May 23, 2008, initiating a public comment period that extended through June 23, 2008.

As indicated in the NOP, the EIR addressed the full range of environmental impacts of the Project. The NOP included a preliminary list of the potential environmental impacts related to the following resource topics: biological resources; cultural resources; geology, soils and seismology, hydrology and water quality, and traffic. The NOP provided a general description of the proposed Project, location, and objectives (see Appendix A of the Draft EIR for a copy of the NOP).

Pursuant to CEQA Guidelines Section 15083, the San Francisco Planning Department held a public scoping meeting on June 10, 2008, at Meadows Elementary School in Millbrae, California. The purpose of the meeting was to present the proposed Project to the public and to solicit public input regarding Project issues of concern to the community, and identify environmental effects and potential alternatives to be considered in the environmental review process. Attendees were provided an opportunity to voice comments or concerns regarding potential effects of the Project.

Based on the sign-in sheet for the meetings, approximately 18 people unrelated to the Project team or staff attended the public scoping meeting. The transcript of the public scoping meeting is presented in Appendix A of the Draft EIR.

In addition to comments received during scoping meeting, the San Francisco Planning Department received written comments in the form of 24 letters or emails. The comment inventory is included in Appendix A of the Draft EIR. Comments received addressed environmental issues such as aesthetics, traffic, biological resources, cultural resources, water quality, public services, hazardous materials, and seismic safety. Comments also addressed loss of the existing horse stables, project alternatives, permitting requirements, and the relationship of the Project to WSIP goals.

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 HTWTP Long-Term Improvements 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 two alternatives to the proposed 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 April 1, 2010, for a 45 day public review period, which closed on May 17, 2010. Public hearings on the Draft EIR to accept written or oral comments were held in Millbrae on April 29, 2010, and in San Francisco on May 13, 2010. During the public review period, the San Francisco Planning Department received 970 written comments sent through the mail, hand delivery, fax, or email, and 32 verbal comments from

speakers at the two public hearings. A court reporter was present at each of the public hearings, transcribed the oral comments verbatim, and prepared written transcripts.

The Comments and Responses ("C&R") document was published on September 24, 2010, and it included copies of all of the comments received on the Draft EIR as well as individual responses to those comments. The C&R provided additional, updated information and clarification on issues raised by commenters, as well as the consultant, SFPUC and Planning Department experts. The Planning Commission reviewed and considered the Final EIR, which includes the Draft EIR, the C&R document and all Errata Sheets, and all of the supporting information. The Final EIR provided augmented and updated information on analysis 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, nosie and vibration, air quality, recreation, and cumulative impacts. 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.

The Custodian of Records is Karen Frye and the records may be found in the files for SFPUC Project No. CUW36701 in the Bureau of Environmental Management, San Francisco Public Utilities Commission, 1145 Market Street, San Francisco, California 94102.

D. Approval Actions

1. Planning Commission Actions

On October 14, 2010, 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:

- Federal Aviation Administration
- California Department of Fish and Game
- California Department of Public Health
- California Department of Transportation
- Cal/OSHA
- San Francisco Bay Regional Water Quality Control Board
- Bay Area Air Quality Management District
- San Mateo County Public Works Agency
- San Mateo County
- City of Millbrae
- City of San Bruno

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 incorporates them by reference herein and relies 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.

As described above, the Final EIR analyzed environmental impacts according to major Project components, where appropriate, as well as analyzing cumulative impacts. Major Project components include construction and operational activities at the Treated Water Reservoir, Treatment Process and Chemical Storage Facilities, and Site Improvements. The impacts identified in Sections II, III and IV, below, apply to the entire Project (all components) unless otherwise indicated. If an environmental impact finding from the Final EIR applies to a subset of Project components rather than the entire Project, then the relevant components are indicated in brackets next to the finding, below (e.g., [Sunset Branch Pipeline]). In addition, as also reflected in the Final EIR analysis, impact findings may differentiate between the effects of construction and operation. References to operational impacts or Project operation refer to long-term impacts caused by operation of the HTWTP after completion of construction.

With regard to Air Quality impacts, the Final EIR analyzes potential impacts under two different sets of Bay Area Air Quality Management ("BAAQMD"). As explained in the Final EIR, the dual analysis reflected the emergence of updated BAAQMD CEQA Air Quality Guidelines ("2010 BAAQMD Guidelines") during the period in which the lead agency prepared the EIR. On June 2, 2010, subsequent to publication of the Draft EIR, the BAAQMD adopted the 2010 BAAQMD Guidelines. Even though the environmental analysis of the Project began well in advance of the effective date of the 2010 BAAQMD Guidelines, these findings conservatively rely on the impact analysis and determinations in the Final EIR based upon BAAQMD's recently adopted assessment methodologies, significance thresholds, and mitigation strategies. Consequently, these findings disregard any impact determinations in the Final EIR made using the 1999 BAAQMD Guidelines.

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 the Project will not result in any significant impacts in the following areas and that these impact areas therefore do not require mitigation.

Land Use

- Temporary disruption of existing land use activities and alteration of existing land use character from construction activities.
- Permanent alteration of existing land use character from new facilities.
- Cumulative impacts.

Aesthetics

- Construction-related temporary degradation of views of scenic vistas from a designated scenic highway or roadway.
- Construction-related temporary degradation of visual character and quality in and adjacent to the project area during construction.
- Permanent degradation of views of scenic vistas from a designated scenic highway or roadway.
- Degradation of the existing visual character of the project area.
- New temporary or permanent sources of light and glare.

Cultural and Paleontological Resources

- Impacts from Project operation.

Transportation and Circulation

- Temporary reduction in roadway capacity from construction activities and increased traffic delays during construction.
- Long-term traffic increases from Project operation.

Noise and Vibration

- Temporary vibration from construction activities.
- Long-term noise increase from Project operation.

Air Quality

- Generation of odors during Project construction.
- Conflict between GHG construction emissions and any applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions.
- Conflict with implementation of applicable regional air quality plans addressing criteria air pollutants and State goals for reducing emissions.
- Generation of odors from Project operation.
- Conflict between operational emissions and an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Recreation

- Physical degradation of existing recreational resources during construction.
- Physical degradation of existing recreational resources from Project operation.
- Deterioration in quality of the recreational experience from Project operation.
- Cumulative impacts.

As set forth in the Final EIR, the SFPUC made best efforts to identify an alternative design that would not require closing the stables. Unfortunately, no alternative exists that would both allow the stables to continue operating and meet critical Project objectives. Nonetheless, the Draft EIR prompted numerous public comments regarding termination of Skyline Stables lease and, in particular, whether this effect of the Project would result in a significant recreational impact on equestrian resources.

The Final EIR presents extensive analysis and regional data in support of its determination that closure of Skyline Stables would not result in a significant recreational impact, including a detailed equestrian survey identifying the availability of alternative equestrian resources in the area. In addition to the analysis of Recreation impacts in Section 4.7 of the Final EIR, the C&R document fully responds to the CEQA concerns raised by commenters (see page 3-58 of the C&R document, Section 3.10 (Recreation), as well as C&R discussions of Skyline Stables in Section 3.1 (General Comments), Section 3.2 (Project Description), Section 3.4 (Land Use and Land Use Planning), Section 3.6 (Cultural and Paleontological Resources), and Section 3.11

(Cumulative Impacts). The analysis presented in the Final EIR, and incorporated into these findings by reference thereto, constitute substantial evidence that closure of Skyline Stables constitutes a less-than-significant impact under CEQA.

Utilities and Service Systems

- Increased generation of solid waste and potential effects on landfill capacity from Project construction.
- Impacts from Project operation.

Biological Resources

- Potential adverse effects on oak woodlands from construction.
- Impacts from Project operation.

Geology and Soils

- Slope instability during construction.
- Loss of topsoil and accelerated erosion during construction.
- Substantial alteration of topography from site grading.
- Damage to facilities from surface fault rupture.
- Damage to facilities from seismically induced ground shaking.
- Damage to facilities from seismically induced ground failure, including liquefaction, lateral spreading, and settlement.
- Damage to facilities from landslides, including seismically induced landslides.

Hydrology and Water Quality

- Degradation of water bodies from dewatering discharges during construction [all project components except Treated Water Reservoir].
- Depletion of groundwater resources during construction.

Hazards and Hazardous Materials

- Accidental release of hazardous materials during construction.
- Aviation hazards during construction.
- Increased risk of wildland fires during construction.
- Exposure to gassy conditions in tunnels during construction.
- Exposure to naturally occurring asbestos during construction [all project compenents except Treatment Process and Chemical Storage Facilities].
- Accidental release of hazardous materials during operation.
- Emission or use of hazardous materials or substances within 0.25 mile of a school during operation.
- Potential aviation hazards during operation.
- Increased risk of wildland fires during operation.

Energy Resources

- Increased fuel and energy use during construction.
- Increased energy use during Project operation.
- Cumulative impacts.

Population and Housing

- No impacts.

Wind and Shadow

- No impacts.

Public Services

- No Impacts.

Mineral Resources
- No impacts.

Agricultural Resources
- No impacts.

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 the mitigation measures proposed in the EIR and recommended for adoption 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 California Department of Transportation (CalTrans), the Regional Water Quality Control Board, the California Department of Fish and Game, and the Bay Area Air Quality Management District. 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-3: Temporary creation of new sources of light or glare from construction activities.

Construction hours would be from dawn until dusk, Monday through Friday and possibly on Saturday. Typical construction hours (not during system shutdown periods) would occur between the hours of 7:00 a.m. to 6:00 p.m., Monday through Friday. If necessary, construction work may occasionally occur on Saturdays between the hours of 7:00 a.m. and 5:00 p.m. Most work occurring between 7:00 a.m. and 9:00 am on Saturdays would be limited to work inside buildings that does not involve heavy construction equipment. Prior to and/or during system shutdown periods, work could occur throughout a 24-hour period, 7 days per week, and could last for up to 2 months under maximum construction activities. The type of exterior construction activities that would occur during system shutdown periods include relining of pipelines, tying into existing pipelines for pipeline replacements, and installation of other critical path items such as process equipment and appurtenances. The majority of the proposed staging areas and construction sites would be located within the HTWTP site and are not visible from surrounding roadways or residences located outside of the project area. However, lighting of nighttime construction activities could create additional light that would substantially affect adjacent residences along Helen Drive to the east and Sycamore Drive and Crestview Drive to the south. Temporary lighting would be directed downward and inward to minimize visibility from adjacent residences. The proposed project includes installation of the temporary fencing along the southern boundary of the HTWTP site, which would help reduce light spillage to the south. However, because construction activities could occur 24 hours per day during shutdown periods and the lights could be tall mobile lights, this impact would be potentially significant (see Draft EIR pages 5.3-6 through 5.3-7).

- *Mitigation Measure AES-1:* Light reduction measures.

Impact CR-1: Potential to directly or indirectly destroy paleontological resources during construction.

Construction activities including excavation, grading, and pile driving would occur within the highly sensitive Merced Formation, which could have significant impacts on paleontological resources (see Draft EIR pages 5.4-32 through 5.4-33).

- *Mitigation Measure CR-1*: Worker awareness training.
- *Mitigation Measure CR-2*: Paleontological assessment.
- *Mitigation Measure CR-3*: Stop work if vertebrate fossil materials are encountered during construction

Impact CR-2: Potential disturbance of human remains during construction.

Although no record of human remains was identified within the project area as a result of a records search, archaeological fieldwork, or through communication with the Native American Heritage Council and interested local Native American individuals, excavation during project construction could result in potentially significant impacts on unrecorded or undiscovered human remains (see Draft EIR pages 5.4-33 through 5.4-34).

- *Mitigation Measure CR-4*: Implement treatment measures if human remains encountered.

Impact CR-3: Adverse change to unknown or known prehistoric or historic-era archaeological resources during construction.

It is unlikely that the proposed project would adversely affect unknown or known prehistoric or historic archaeological resources, because the majority of the proposed activities would be conducted within existing facilities that have been previously disturbed, graded, or paved. Extant cultural resources are likely to be obscured or deeply buried beneath the native surface. However, because the proposed project would be located in an area of low-to-moderate sensitivity, the potential exists to adversely affect archaeological resources. Given the potential that this project could affect archaeological resources, and that such impacts could be potentially significant (see Draft EIR page 5.4-34).

- *Mitigation Measure CR-5*: Accidental discovery measures.
- *Mitigation Measure CR-6*: Archaeological monitoring plan.

Impact TRA-3: Temporary displacement of on-street parking and school parking during construction.

Based on several field surveys conducted during 2009, there appears to be adequate capacity along Helen Drive to accommodate construction worker parking. However, the capacity for on-street parking would be reduced during school drop-off and pick-up times and during the relining of the Sunset Branch Pipeline when construction activities potentially displace additional parking on Helen Drive and in the school parking lot. The exact availability and capacity of construction parking at the swim club, school, or elsewhere would depend on the location of the Sunset Branch Pipeline access pit, which would be located in the school parking lot or in Helen Drive. In addition, the demand for parking at the school and swim club varies depending on the time of year. For the foregoing reasons, the potential combination of the proposed project's peak parking demand and its displacement of parking places on local

residents, the swim club, and the school would be a potentially significant impact (see Draft EIR pages 5.5-17 through 5.5-18).

- *Mitigation Measure TRA-1:* Prepare and implement a traffic control plan for HTWTP prior to and during project construction.

Impact TRA-4: Increased traffic safety hazards during construction.

Construction vehicles could be considered a safety hazard for local vehicles, bicyclists, and pedestrians on adjacent public roadways because the local users may not be accustomed to the presence of construction vehicles and there could be an increase in conflicts (i.e., traffic accidents). The potential safety hazards that construction vehicles may create on local roadways could increase the risk of accidents with vehicular, pedestrian, and/or bicycle traffic, as well as with bus traffic (SamTrans public transit and school buses). This would be a potentially significant impact (see Draft EIR pages 5.5-18 through 5.5-19).

- *Mitigation Measure TRA-1:* Prepare and implement a traffic control plan for HTWTP prior to and during project construction.

Impact NOI-1: Temporary increase in ambient noise levels on and around the project area during construction.

Construction activities are predicted to result in potentially significant noise impacts as a result of exceedance of the speech and sleep thresholds (see Draft EIR pages 5.6-20 through 5.6-37).

- *Mitigation Measure NOI-1*: Employ noise-reducing measures during construction.
- *Mitigation Measure NOI-2:* Distribute public notice of planned construction to adjacent residences, Meadows Elementary School, and the Millbrae Meadows Swim Club prior to construction.
- *Mitigation Measure NOI-3*: Conduct worker awareness training for noise reduction prior to construction.
- *Mitigation Measure NOI-4*: Prepare and implement a noise control plan prior to and during construction.

Impact NOI-2: Exposure of people to or generation of noise levels in excess of local standards established in the local general plan or noise ordinance, or applicable standards of other agencies during construction.

Construction activity that occurs in Millbrae outside of the hours allowed for construction in the City's noise ordinance could be inconsistent with Millbrae's noise ordinance and therefore could result in a significant noise impact by exposing people to noise levels in excess of local standards(see Draft EIR page 5.6-38).

- *Mitigation Measure NOI-1*: Employ noise-reducing measures during construction and limit hours of construction in Millbrae.
- *Mitigation Measure NOI-2*: Distribute public notice of planned construction to adjacent residences, Meadows Elementary School, and the Millbrae Meadows Swim Club prior to construction.
- *Mitigation Measure NOI-3*: Conduct worker awareness training for noise reduction prior to construction.

- *Mitigation Measure NOI-4*: Prepare and implement a Noise Control Plan prior to and during construction.

Impact NOI-3: Temporary increase in traffic noise along public roadways from construction-related vehicles.

Nighttime work may be necessary prior to and/or during system shutdown periods, which could occur for up to two months. The small number of passenger vehicle and pickup truck worker trips potentially associated with nighttime is not expected to result in an adverse noise impact, given that these vehicles typically travel in residential areas and have gasoline engines that are quieter than heavy diesel-powered trucks. However, more than 2 heavy truck passages per hour would result in noise that exceeds 50 dBA at the nearest residences and would be a potentially significant impact (see Draft EIR pages 5.6-38 through 5.6-39).

- *Mitigation Measure NOI-5*: Limit heavy trucks in residential areas to two trucks per hour at night.

Impact AIR-1: Construction emissions of criteria pollutants.

Construction of the proposed project would result in the temporary generation of emissions of ROG, NO_X, CO, PM_{10}, and $PM_{2.5}$ that would result in short-term impacts on ambient air quality. Emissions would originate from mobile and stationary construction equipment exhaust, employee vehicle exhaust, dust from slope stabilization activities and the demolition of structures, exposed soil eroded by wind, and ROG from architectural coatings (e.g., evaporative emissions from paint) and asphalt paving. Construction-related emissions would vary substantially depending on the level of activity, length of the construction period, specific construction operations, types of equipment, number of personnel, wind and precipitation conditions, and soil moisture content. The air quality impact from construction activities would be temporary and limited to the approximately four-year duration of project construction (see Draft EIR pages 5.7-30 through 5.7-35 and C&R pages 4-19 through 4-25).

- *Mitigation Measure AIR-1:* Implement BAAQMD dust control measures during construction.
- *Mitigation Measure AIR-2:* Implement BAAQMD basic exhaust control measures during construction.

Impact AIR-2: Exposure to diesel particulate matter during construction.

Construction-related emissions of diesel particulate matter could exceed the Bay Area Air Quality Management District (BAAQMD) June 2010 thresholds of significance for annual average ambient $PM_{2.5}$ concentration, which would represent a significant impact on air quality (see Draft EIR pages 5.7-36 through 5.7-43 and C&R pages 4-25 through 4-31).

- *Mitigation Measure AIR-2:* Implement BAAQMD basic and additional exhaust control measures during construction.

Impact UTL-1: Potential temporary damage to or disruption of existing utilities during construction.

Construction activities would result in the temporary disruption of existing water, electrical, or natural gas services, whether as part of a planned service shutdown or as the result of possible physical damage to utility lines during construction (see Draft EIR pages 5.9-5 through 5.9-7).

- *Mitigation Measure UTL-1:* Locate utility lines and coordinate with utility providers prior to construction, and ensure prompt reconnection of utilities disrupted during construction.
- *Mitigation Measure UTL-2:* Develop and implement worker safety provisions for excavation near natural gas pipelines prior to and during construction.
- *Mitigation Measure HAZ-2:* Prepare and implement project Hazardous Material Handling and Disposal Plan prior to and during construction.

Impact UTL-3: Potential non-compliance with federal, state, and local solid waste regulations.

The Ox Mountain Sanitary Landfill, either individually or in combination with other disposal facilities (such as the Guadalupe Sanitary Landfill Site and the Waste Management Altamont Landfill and with other construction and demolition debris recycling facilities (such as the San Carlos Transfer Station, the Zanker Road Landfill and Newby Island Resource Recovery Park), could accommodate 50 percent of demolition and construction debris generated by the proposed project. Because there is some uncertainty whether the project's diversion rate from local landfills would be consistent with San Mateo County requirements to divert 100 percent of inert solids and 50 percent of construction and demolition debris, this impact is considered potentially significant (see Draft EIR pages 5.9-8 through 5.9-9).

- *Mitigation Measure UTL-3:* Develop and implement a waste management plan and spoils diversion plan.

Impact BIO-1: Potential adverse effects on special-status raptors during construction.

Implementation of the Project could result in significant impacts on special-status raptors with potential to occur at the proposed location of the new treated water reservoir, the proposed areas for pipeline installation from the treated water reservoir to Line N Pipeline, and the new treated water sampling building and ancillary facilities. Project construction would result in tree and vegetation removal, as well as noise and other disturbance associated with construction. Raptor nests are generally considered a perennial resource, meaning that a single nest can be used in consecutive years by the same species or even by other raptor species. No raptor nests were observed in the study area during field surveys although the potential exists that new nests could be built before project construction begins.

Construction activities that occur during the breeding season, generally from March 1 through September 1, including the removal or trimming of trees and brush, and construction near structures that may support nests, could result in the potential loss of or disturbance to special-status nesting raptors, including sharp-shinned hawk and Cooper's hawk, or their nests (see Draft EIR pages 5.10-21 through 5.10-22).

- *Mitigation Measure BIO-1*: Worker awareness training.
- *Mitigation Measure BIO-2*: Preconstruction surveys for raptor nests.

Impact BIO-2: Potential adverse effects on nesting migratory birds during construction.

Construction activities throughout the study area that occur during the breeding season, generally from February 15 to September 15, including the removal or trimming of trees and brush, and construction near structures that may support nests, could result in the potential loss or disturbance of a number of common migratory birds and raptors. The loss or disturbance of migratory birds or their nests would be a potentially significant impact because the proposed project could result in the loss of migratory birds and could violate the MBTA and California Fish and Game Code (see Draft EIR page 5.10-22).

- *Mitigation Measure BIO-1*: Worker awareness training.
- *Mitigation Measure BIO-3*: Preconstruction surveys for migratory bird nests.

Impact BIO -3: Potential adverse effects on western red bat during construction.

Western red bats may roost in all woodland and riparian forest habitats found within the study area. Tree removal or trimming of trees that contain roosting bats could result in injury or mortality of bats. In addition, construction noise and activities could disturb roosting bats. Mortality or injury of western red bats would be a potentially significant impact because this species is of special concern to the State due to habitat loss (see Draft EIR pages 5.10-22 through 5.10-23).

- *Mitigation Measure BIO-1*: Worker awareness training.
- *Mitigation Measure BIO-4*: Preconstruction surveys for western red bats.

Impact BIO-4: Potential adverse effects on San Francisco dusky-footed woodrat.

Suitable habitat for the San Francisco dusky-footed woodrat is present in sections of the forested area in the northern portion of the study area. No woodrat lodges were observed during reconnaissance-level field surveys, but there is the possibility that new nests could be constructed prior to the start of construction. If individuals are present, there is the potential for individuals to be injured or killed by construction activities associated with project implementation given that woodrat nests could be removed or disturbed by construction equipment or personnel in association with the establishment of construction access within riparian forest habitat. Inadvertent injury or mortality of woodrats could also result from construction activities. In addition, noise, vibrations, and presence of human activity during construction may disturb woodrats within or near the project sites. Mortality or injury of San Francisco dusky-footed woodrats would be a potentially significant impact because this species is of special concern to the State given that it has a limited range (see Draft EIR page 5.10-23).

- *Mitigation Measure BIO-1*: Worker awareness training.
- *Mitigation Measure BIO-5*: Preconstruction surveys for dusky-footed woodrat nests.

Impact BIO-5: Potential adverse effects on jurisdictional waters and riparian habitat from construction activities.

Project construction activities include installing new replacement pipeline for San Andreas Pipeline No. 2 from the Venturi House to Raw Water Pump Station, and installing new replacement pipeline for Line N Pipeline have the potential to degrade El Zanjón Creek and the riparian vegetative community or violate water quality standards as a result of erosion, sedimentation, and accidental releases of pollutants. Construction activities that would occur in the vicinity of the sub-drainage near the PG&E substation, but outside of the riparian community, include constructing new equipment pads at the PG&E substation and using nearby areas for construction staging, could also cause soil disturbance or inadvertently release pollutants to the sub-drainage. These potential impacts on the waters and riparian habitat associated with erosion, sedimentation, and inadvertent spills of petroleum products during construction could be significant (see Draft EIR pages 5.10-23 through 5.10-24).

- *Mitigation Measure HYD-5*: Construction period erosion and sedimentation controls.

Impact BIO-6: Potential inconsistencies with local policies or ordinances protecting biological resources including tree ordinances.

Project construction activities would require removal of trees considered significant and heritage trees under the San Mateo County Tree Ordinance Code. Approximately 15 significant trees would likely be removed to construct the new treated water reservoir, sampling building, other ancillary facilities and the new driveway to the new treated water reservoir. Additional tree removal may be required for slope stabilization, installation of the new washwater tank, pipeline replacement, and construction of the new chlorination building. Tree removal that is inconsistent with the San Mateo County tree preservation ordinances would be a potentially significant impact (see Draft EIR page 5.10-24).

- *Mitigation Measure BIO-6:* Tree survey and protection of significant and heritage trees.
- *Mitigation Measure BIO-7:* Replacement of significant and heritage trees removed during construction.

Impact GEO-2: Loss of topsoil and accelerated erosion during construction.

Construction grading and excavation would remove vegetation and expose areas of loose soil that, if not properly stabilized, could be lost through wind erosion or stormwater runoff. Concentrated runoff could result in the formation of erosional channels and larger gullies that could compromise the integrity of the slope and result in significant soil loss. These effects could occur at project component locations where site clearing and/or grading is proposed. Such effects would be a potentially significant impact as they could result in erosional effects on downstream water resources (see Draft EIR page 5.11-14).

- *Mitigation Measure HYD-1:* Implement erosion and sedimentation controls during construction.

Impact GEO-8: Potential damage to facilities from expansive or corrosive soils.

Although clay-rich zones within Franciscan bedrock may be expansive, existing site-specific geotechnical studies prepared for the project have not identified substantial hazards associated with shrink-swell potential in native soils at the HTWTP site. Native site soils assigned to the Candlestick-Kron-Buri Buri complex have been identified as moderately corrosive to uncoated steel and concrete, and the level of corrosion risk posed to uncoated steel and concrete by existing cut and fill soils in the Orthents series is not precisely known. Thus, the potential for corrosive or expansive soils at the HTWTP site exists, which represents a potentially significant impact (see Draft EIR page 5.11-19).

- *Mitigation Measure GEO-1:* Conduct a site-specific geotechnical investigation to characterize the extent of expansive and corrosive soils prior to construction.

Impact HYD-1: Degradation of water bodies from erosion and sedimentation during construction.

In the absence of proper controls, construction activities involving soil disturbance, such as excavation, soil stockpiling, and grading adjacent to or near creeks and reservoirs, could result in erosion and sedimentation, particularly if construction were to occur during the rainy season. Erosion or sedimentation affecting creek channels and reservoirs can degrade aquatic habitat and violate water quality standards. Additionally, use or temporary storage of construction equipment within or immediately adjacent to a creek or reservoir could increase the risk of release of construction-related chemicals, such as fuels and lubricants, which could further degrade water quality (see Draft EIR page 5.12-10).

- *Mitigation Measure HYD-1*: Implement erosion and sedimentation controls during construction.
- *Mitigation Measure HAZ-2*: Prepare and implement project Hazardous Material Handling and Disposal Plan prior to and during construction.

Impact HYD-2: Degradation of water bodies from dewatering discharges during construction.

Groundwater may be encountered during excavation and trenching activities requiring dewatering. Common contaminants such as sediment, oils, and grout may be present in discharged water from construction-related dewatering equipment, and if so, could degrade water quality if discharged directly to surface water or if infiltrated into groundwater, which could result in a significant impact (see Draft EIR page 5.12-11).

- *Mitigation Measure HYD-2:* Prepare and implement dewatering plan and comply with NPDES requirements prior to and during construction.

Impact HYD-4: Water quality impairment and/or downstream flooding from increases in impervious surfaces.

The proposed project would add approximately 85,400 sf of new impervious surface or 2 acres. Approximately 90 percent of the new impervious surface would drain to El Zanjón Creek while the remaining would drain to the San Andreas Reservoir. The new impervious surface area is approximately 21 percent of the total pre-development impervious surface area. The proposed increase in impervious surfaces could result in a significant impact relative to potentially increased water quality impairment and/or downstream flooding. Pursuant to the San Mateo Countywide Water Pollution Prevention Program, projects that create more than 1 acre of new impervious cover are required to conduct hydromodification analysis and implement specific measures to address hydromodification effects. In addition, projects that create more than 10,000 sf of new impervious cover must provide operational BMPs to treat the runoff and maintain the BMPs for the life of the project (see Draft EIR page 5.12-12).

- *Mitigation Measure HYD-3:* Implement permanent stormwater pollution prevention BMPs for the HTWTP.

Impact HAZ-2: Emission or use of hazardous materials or substances within 0.25 mile of a school during construction.

Construction activities would include the use of hazardous materials such as motor fuels, oils, solvents, and lubricants (although there would be no use of acutely hazardous materials). An accidental release or spill of hazardous materials during project construction (e.g., during refueling) in the vicinity of the Meadows Elementary School would have the potential to pose risks to students, school workers, construction workers, the public, and the environment, which would be a potentially significant impact (see Draft EIR page 5.13-11).

- *Mitigation Measure HYD-3:* Implement permanent stormwater pollution prevention BMPs for the HTWTP.

Impact HAZ-5: Potential exposure to hazardous materials in soil encountered during construction.

According to the Phase I ESA prepared for the proposed project, the project area has the potential for lead contamination from lead-based paint to exist in exposed shallow soils adjacent to painted structures associated with the equestrian facilities and the HTWTP structures

constructed before 1978. Exposure to this potential lead contamination could be a potentially significant impact (see Draft EIR page 5.13-12).

- *Mitigation Measure HAZ-1:* Perform site investigation for lead-affected soils prior to construction.
- *Mitigation Measure HAZ-2:* Prepare and implement project Hazardous Material Handling and Disposal Plan prior to and during construction.

Impact HAZ-6: Exposure to naturally occurring asbestos during construction.

Rock containing naturally occurring asbestos, which is associated with serpentinite rock units, is located in the vicinity of the proposed new washwater tank. Therefore, NOA could be encountered during construction of the new washwater tank and associated facilities. Exposure to NOA could pose a health risk to construction workers and the public during earthmoving activities, and must be managed and disposed of properly to avoid additional potential exposures. Any such exposure of people to NOA would be a potentially significant impact (see Draft EIR page 5.13-13).

- *Mitigation Measure HAZ-2:* Prepare and implement project Hazardous Material Handling and Disposal Plan prior to and during construction.

Impact HAZ-8: Potential exposure to hazardous building materials from demolition during construction.

Lead-based paint may be present on painted structures associated with the equestrian facilities that would be demolished prior to establishing staging areas and constructing the new treated water reservoir and other facilities. Demolition of the equestrian facilities could result in potential exposures to lead if lead-based paint is present. Proposed building demolition of the east and west chemical buildings could result in potential exposures to ACMs, lead-based paint, electrical equipment containing PCBs, fluorescent light tubes containing mercury vapors, and fluorescent light ballasts containing DEHP, if present. In addition, the surface of the 20,000-gallon caustic soda tank stored in the operations complex building may contain lead-based paint. Demolition of the caustic soda tank could result in potential exposures to lead if lead-based paint is present. Therefore, the demolition of these structures could potentially expose people to hazardous materials, which would be a potentially significant impact (see Draft EIR page 5.13-14).

- *Mitigation Measure HAZ-3:* Perform hazardous materials building survey prior to demolition.

Impact CUMUL-2: Cumulative impacts on scenic views and visual character.

The only identified cumulative project that could have an adverse impact related to temporary construction sources of nighttime light in relatively close proximity to the Project would be the SFPUC's Crystal Springs / San Andreas (CS/SA) Transmission Upgrade Project, because some construction activities associated with this project could occur at night at the HTWTP. Most of the area in the vicinity of the HTWTP is composed of residential development located to the east of I-280. Potential construction lighting impacts on these areas would be limited to the areas closest to existing facilities, which may already experience some light spillage, particularly in association with lighting and traffic on I-280, as well as from residential street lighting. Thus, there is a potential for a significant cumulative impact on aesthetics due to light and glare.

Given that the proposed project would also have nighttime lighting at the HTWTP location, it could contribute to this cumulative impact. Temporary lighting would be directed downward and inward to minimize visibility from adjacent residences. The proposed project includes installation of fencing along the southern boundary of the HTWTP site, which would help reduce light spillage to the south. However, because construction activities could occur 24 hours per day during shutdown periods (for up to two months at a time during the 4-year construction period) and the lights could be tall mobile lights, this impact would be potentially significant (see Draft EIR pages 6-21 through 6-23).

- *Mitigation Measure AES-1:* Implement light reduction measures.

Impact CUMUL-3: Cumulative increase in impacts on archaeological, paleontological, and historic architectural resources.

During ground-disturbing activity associated with the CS/SA Transmission Upgrade Project at the HTWTP, there is a potential to encounter previously unidentified archaeological resources. If so, the CS/SA Transmission Upgrade Project and the Project could result in significant cumulative impacts on the same archaeological resource. Thus, there is a potential for a cumulatively significant impact. Given that the Project could potentially affect previously unidentified archaeological resources within the same area as the CS/SA Transmission Upgrade Project, its construction could contribute considerably to these impacts.

Because paleontological resource impacts are generally site-specific, the geographic context for the analysis of potential cumulative paleontological impacts is the overlapping area of potential impacts on a single paleontological resource. The area of potential paleontological impacts includes the construction limits associated with proposed Project work that are within geological units with high sensitivity for paleontological resources, which includes portions of the HTWTP and the CS/SA Transmission Upgrade Project work areas for the San Andreas Outlet Structure 2. Present and probable future cumulative projects within this geographic context include the CS/SA Transmission Upgrade Project.

In relation to ground-disturbing activity, there is a potential to encounter paleontological resources during construction of the CS/SA Transmission Upgrade Project. Thus, there is the potential for overlapping impact on a single paleontological resource within the construction work areas at and near the HTWTP. As a result, there is a potential for a cumulatively significant impact. Given that the Project could also impact paleontological resources within these same areas, its construction could contribute considerably to this potential impact (see Draft EIR pages 6-23 through 6-24).

- *Mitigation Measure CR-1*: Conduct worker awareness training for paleontological resources prior to construction.
- *Mitigation Measure CR-2:* Conduct paleontological assessment for construction areas involving highly sensitive substrate materials.
- *Mitigation Measure CR-3:* Implement stop work order if vertebrate fossil materials are encountered during construction.
- *Mitigation Measure CR-4*: Implement treatment measures if human remains are encountered during construction.
- *Mitigation Measure CR-5*: Implement inadvertent archaeological discovery controls during construction.
- *Mitigation Measure CR-6*: Prepare archaeological monitoring plan.

Impact CUMUL-8: Cumulative impacts related to potential disruptions of utility service and potential non-compliance with local solid waste regulations.

Construction activities of the identified cumulative projects could temporarily disrupt existing utility services (water, storm drainage, electrical, or natural gas) in either a planned or unplanned manner. A cumulative impact on utilities could result, especially if one or more utility were disrupted multiple times during the construction of the cumulative projects. Given the number of identified cumulative projects that could be under construction simultaneously with the proposed project, the potential exists for one or more utilities to be disrupted multiple times during the construction of the Project, which would represent a potentially significant cumulative impact on utilities. In addition, given that the Project could also disrupt utilities in an unplanned manner during pipeline installation, repair, and replacement, the proposed project could contribute considerably to a potentially significant cumulative impact regarding utility disruption (see Draft EIR pages 6-44 through 6-45).

- *Mitigation Measure UTL-1*: Locate utility lines and coordinate with utility providers prior to construction, and ensure prompt reconnection of utilities disrupted during construction.
- *Mitigation Measure UTL-2*: Develop and implement worker safety provisions for excavation near natural gas pipelines prior to and during construction.
- *Mitigation Measure UTL-3*: Develop and implement a waste management plan and spoils diversion plan.

Impact CUMUL-9: Cumulative loss of sensitive biological resources.

Local cumulative biological resource impacts could occur during construction of the CS/SA Transmission Upgrade Project and the Meadows School Field Renovation. Specifically, construction of the CS/SA Transmission Upgrade Project has the potential to cause significant impacts on the following: coast live oak habitat, riparian habitat at El Zanjón Creek, habitat for western red bat and San Francisco dusky-footed woodrat, and individual trees that could provide nesting or roosting habitat for special-status bird and bat species as well as nesting migratory birds. In addition, discharges of water or erosion during construction of the CS/SA Transmission Upgrade Project could affect water quality in El Zanjón Creek, which could then impact common species that rely on this habitat. Construction of the Meadows School Field Renovation resulted in removal of some local trees, but all the trees were replaced two-fold as mitigation. Thus, significant cumulative impacts on biological resources could only be caused by construction of the CS/SA Transmission Project (as the Meadows School Field Renovation had minimal impacts on biological resources that have already been mitigated).

The Project could result in significant impacts on biological resources, including sensitive habitats, locally protected trees, special-status plant and wildlife species, and riparian habitat. Therefore, given that one of the identified cumulative projects could result in significant cumulative impacts on sensitive biological resources, as described above, and given that the Project could also result in significant impacts on many of these same sensitive biological resources, the proposed project could contribute considerably to the potentially significant cumulative biological impacts discussed above.

With Project mitigation, it remains possible that overlapping staging areas and access (in this case concerning the CS/SA Transmission Upgrade Project and the proposed project) could result in significant cumulative biological resource impacts in spite of the project-specific mitigation measures noted above. Due to the adjacent and overlapping projects potentially occurring at the same time, uncoordinated staging and access could result, which could then result in unnecessary disturbance of natural vegetation areas beyond the minimum necessary. Avoidance is the first option under CEQA to be considered, but if staging and access are inadequately coordinated, feasible avoidance may not be fully achieved. Such potential shortfalls could result in a significant cumulative impact on biological resources (see Draft EIR pages 6-45 through 6-47).

- *Mitigation Measure BIO-1*: Prepare a biological resources awareness program for construction workers, and implement prior to and during construction.
- *Mitigation Measure BIO-2*: Conduct preconstruction surveys for special status raptor nests.
- *Mitigation Measure BIO-3*: Conduct preconstruction surveys for migratory bird nests.
- *Mitigation Measure BIO-4*: Conduct preconstruction surveys for western red bats.
- *Mitigation Measure BIO-5*: Conduct preconstruction surveys for San Francisco dusky-footed woodrat nests.
- *Mitigation Measure BIO-6*: Conduct a tree survey and protect significant trees and heritage trees.
- *Mitigation Measure BIO-7*: Replace significant trees and heritage trees that are removed during construction.
- *Mitigation Measure HYD-1*: Implement erosion and sedimentation controls during construction.
- *Mitigation Measure HYD-2*: Prepare and implement dewatering plan and comply with NPDES requirements prior to and during construction
- *Mitigation Measure HYD-3*: Implement permanent stormwater pollution prevention BMPs for the HTWTP.
- *Mitigation Measure BIO-8*: Coordinate construction staging and access.

Impact CUMUL-10: Cumulative exposure of people or structures to geologic and seismic hazards.

Potential geologic and soils impacts associated with implementation of the CS/SA Transmission Upgrade Project include impacts related to slope instability during construction, erosion, alteration of topography, and expansive or corrosive soils which would also be site-specific (dependent on localized geologic and soil conditions). The CS/SA project is required to conform to the California Building Code and the SFPUC's General Seismic Requirements for Design of New Facilities and upgrade of Existing Facilities (SFPUC 2006); thus, potential cumulative impacts related to slope stability and alteration of topography would not be significant since implementation of these codes and design standards would adequately address these issues. However, potential cumulative erosion and soil hazards impacts could be significant given that the CS/SA Transmission Upgrade Project could potentially cause the acceleration of soil erosion or loss of topsoil. Construction grading and excavation would remove vegetation and expose areas of loose soil that, if not properly stabilized, could be lost through wind erosion or stormwater runoff. Concentrated runoff could result in the formation of erosional channels and larger gullies that could compromise the integrity of the slope and result in significant soil loss. Such effects would be a potentially significant impact as they could result in loss of topsoil and erosional effects on downstream water resources. The CS/SA project would also be constructed in an area of moderately corrosive soils, which could result in risks to infrastructure. The proposed Project could contribute considerably to these potentially significant cumulative impacts relative to erosion and soil hazards due to construction disturbance of soils that could cumulatively affect downstream water bodies and given the moderate corrosive and expansive soils potential at both of the HTWTP and CS/SA Transmission Upgrade Project sites (at the HTWTP) (see Draft EIR pages 6-47 through 6-48).

- *Mitigation Measure HYD-1*: Implement erosion and sedimentation controls during construction.
- *Mitigation Measure GEO-1*: Conduct a site-specific geotechnical investigation to characterize the extent of expansive and corrosive soils prior to construction.

Impact CUMUL-11: Cumulative impacts related to the degradation of water quality, alteration of drainage patterns, increased surface runoff, and flooding hazards.

The identified cumulative projects have the potential to adversely affect water quality via erosion and sedimentation, including from dewatering discharges, during construction. The Project in conjunction with the identified cumulative projects would be required to comply with federal Clean Water Act, State National Pollutant Discharge Elimination System, and state regulations under the Porter – Cologne Water Quality Control Act, as applicable. The federal and state discharge regulations are designed to protect water quality on a region-wide basis and incorporate measures to protect beneficial uses of water bodies based on overall consideration of past, present, and future conditions within the region. Regardless, because of the potential for construction of the identified cumulative projects to result in the erosion of soils and sedimentation of water bodies in the El Zanjón Creek and San Andreas Reservoir watersheds, there is the potential for a cumulative impact related to degradation of water quality.

Given that the Project has its own potential to cause impacts on water quality, the proposed project could contribute considerably to a potentially significant cumulative impact on water quality.

The identified SFPUC-proposed cumulative projects do not include large increases in impervious surfaces. The non-SFPUC cumulative residential projects could result in increased impervious surfaces. Therefore, the identified cumulative projects could cause potentially significant cumulative impacts on hydrology and water quality resulting from the creation or contribution of runoff water that could exceed the capacity of existing or planned stormwater drainage systems or by providing substantial additional sources of polluted runoff.

The Project would create approximately 2 acres of new impervious surfaces. Therefore, the Project could contribute to cumulatively significant water quality and flooding impacts. However, pursuant to the local countywide stormwater pollution prevention program, the Project will conduct hydromodification analysis and implement specific measures to address hydromodification impacts. In addition, the Project will establish operational BMPs to treat the runoff and must maintain the BMPs for the life of the project (see Draft EIR pages 6-48 through 6-50).

- *Mitigation Measure HYD-1*: Implement erosion and sedimentation controls during construction.
- *Mitigation Measure HYD-2*: Prepare and implement dewatering plan and comply with NPDES requirements prior to and during construction.
- *Mitigation Measure HYD-3*: Implement permanent stormwater pollution prevention BMPs for the HTWTP.

Impact CUMUL-12: Cumulative effects related to hazardous conditions and exposure to or release of hazardous materials.

During construction at and near the HTWTP, the CS/SA Transmission Upgrade Project has the potential to expose people or the environment to hazardous materials resulting from accidental spills (e.g., motor fuels, oils, solvents, lubricants) and/or from encountering hazardous materials in soils (e.g., residues of lead-based paint in soils, naturally occurring asbestos) which could occur at the same time as the proposed project. The HTWTP-ST project would also have a potential to expose people or the environment although this exposure would happen before the proposed project. Thus, due to the possibility of encountering hazardous materials, there is the potential for significant cumulative impacts relative to exposure to such materials.

Given that the Project involves construction within the same vicinity as CS/SA Transmission Upgrade Project and the HTWTP–ST project, the Project could also contribute considerably to potentially significant cumulative impacts related to unexpected discoveries of hazardous materials (see Draft EIR pages 6-50 through 6-51).

- *Mitigation Measure HAZ-1*: Perform site investigation for lead-affected soils prior to construction.
- *Mitigation Measure HAZ-2*: Prepare and implement project Hazardous Material Handling and Disposal Plan prior to and during construction.
- *Mitigation Measure HAZ-3*: Perform hazardous materials building survey prior to demolition.

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

A. HTWTP Long-Term Improvements Project Impacts

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 Project to reduce the significant environmental impacts listed below as identified in the Final EIR. 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 Project that, pursuant to 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 Final EIR Chapters 5 and 6. The SFPUC adopts all of the mitigation measures proposed in the Final EIR and set forth in the MMRP, attached hereto as Attachment B. The SFPUC further finds, however, for the impacts listed below, despite the implementation of mitigation measures, the effects remain significant and unavoidable. Based on the analysis contained within the Final EIR, other considerations in the record, and the standards of significance, the SFPUC finds that because some aspects of the 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 determines that the following significant impacts on the environment, as reflected in the Final EIR, are unavoidable, but under Public Resources Code Section 21081(a)(3) and (b), and CEQA Guidelines 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 VII below. This finding is supported by substantial evidence in the record of this proceeding.

Impact TRA-2: Temporary increase in traffic load on roadways caused by construction-related vehicle trips and resultant impact on roadway level of service during construction.

Construction-related traffic would change the level of service (LOS) at the two-way stop-controlled intersection of I-280 on- and off- ramps and Cunningham Way (minor street approach) from LOS D to LOS E during the AM peak hour and this could potentially cause a significant impact. Implementation of **Mitigation Measure TRA-1**, which requires the contractor to prepare and implement a traffic control plan, may reduce this potentially significant impact to a less-than-significant level by implementing traffic controls, such as installing and operating a temporary traffic signal or using flaggers at the intersection during the AM peak hour (i.e., 7:00 a.m. to 9:00 a.m.) if outbound construction trips would be 10 or more per hour during this time. The intersection of I-280 on- and off-ramps and Cunningham Way meets the traffic signal warrant, and the intersection as a whole would operate at LOS B with a temporary traffic signal. However, the intersection of the I-280 on-ramp and Cunningham Way is subject to Caltrans jurisdiction; consequently, the SFPUC lacks direct authority over the intersection. Therefore, because the SFPUC cannot ensure that Caltrans would approve traffic control measures at the intersection of the I-280 on-ramp and Cunningham Way, the EIR conservatively

concludes that Project-related impacts at this intersection during construction could potentially be significant and unavoidable (see Draft EIR pages 5.5-11 through 5.5-17).

- *Mitigation Measure TRA-1:* Prepare and implement a traffic control plan for HTWTP prior to and during project construction

Impact NOI-1: Temporary increase in ambient noise levels on and around the project area during construction (Sunset Branch pipeline).

Because feasible mitigation measures are not expected to reduce construction noise associated with relining of the Sunset Branch pipeline (including pile driving during the day and other construction at night) to a less-than-significant level, and because the resulting temporary increases in ambient noise levels associated with relining the Sunset Branch pipeline would be significant and unavoidable (see Draft EIR pages 5.6-20 through 5.6-37).

- *Mitigation Measure NOI-1*: Employ noise-reducing measures during construction
- *Mitigation Measure NOI-2*: Distribute public notice of planned construction to adjacent residences, Meadows Elementary School, and the Millbrae Meadows Swim Club prior to construction
- *Mitigation Measure NOI-3*: Conduct worker awareness training for noise reduction prior to construction
- *Mitigation Measure NOI-4*: Prepare and implement a noise control plan prior to and during construction

Impact NOI-2: Exposure of people to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (Sunset Branch pipeline).

Because feasible mitigation measures are not expected to reduce construction noise associated with relining of the Sunset Branch pipeline (including pile driving during the day and other construction at night) to a less-than-significant level, the resulting temporary increases in ambient noise levels associated with relining the Sunset Branch pipeline would be significant and unavoidable. Construction activity that occurs in Millbrae outside of the hours allowed for construction in the City's noise ordinance could be inconsistent with Millbrae's noise ordinance and therefore could result in a significant noise impact by exposing people to noise levels in excess of local standards. In addition, this significant impact would be unavoidable for the portion of the project that occurs in Millbrae given that construction of the project would require 24-hour construction during systems shutdowns (see Section 3.6.5, *Construction Schedule*), and given that this activity would occur in close proximity to sensitive noise receptors in Millbrae (see Draft EIR page 5.6-38).

- *Mitigation Measure NOI-1*: Employ noise-reducing measures during construction and limit hours of construction in Millbrae
- *Mitigation Measure NOI-2*: Distribute public notice of planned construction to adjacent residences, Meadows Elementary School, and the Millbrae Meadows Swim Club prior to construction
- *Mitigation Measure NOI-3*: Conduct worker awareness training for noise reduction prior to construction
- *Mitigation Measure NOI-4*: Prepare and implement a Noise Control Plan prior to and during construction

Impact AIR-1: Construction emissions of criteria pollutants (using June 2010 BAAQMD CEQA Guidelines).

Construction-related ozone precursor emissions would exceed the June 2010 thresholds for NO_X. Therefore, under these thresholds NO_X emissions would be significant. The project's daily construction-related emissions of NO_X would need to be reduced by 85 percent to meet the June 2010 BAAQMD threshold. Feasible BAAQMD exhaust controls identified in **Mitigation Measure AIR-2** would reduce NO_X emissions by an estimated 20 to 30 percent, but would still be insufficient to reduce the project's worst-case or average construction-related emissions of NO_X to below the June 2010 BAAQMD thresholds.

Other potential mitigation options that the SFPUC has deemed infeasible for this project include alternative scheduling to reduce daily emissions and avoid overlapping construction and widespread use of electricity for construction equipment (beyond that identified in **Mitigation Measure AIR-2**). Given the many different Project components and the need for Project completion to achieve the seismic reliability goals, any schedule adjustments to avoid overlapping schedules would not only delay achievement of Project goals (placing the water system at risk), but would also extend the overall duration of construction impacts. While grid power would be used where feasible per **Mitigation Measure AIR-2**, some of the project work sites may be too distant from existing power sources and would require the use of equipment that is not suited to electrification (e.g., heavy-duty off-road construction equipment such as graders and backhoes).

Therefore, construction-related emissions of NO_X would be considered a potentially significant and unavoidable impact on air quality under the June 2010 BAAQMD CEQA thresholds (see Draft EIR pages 5.7-30 through 5.7-35 and C&R pages 4-19 through 4-25).

- *Mitigation Measure AIR-1:* Implement BAAQMD dust control measures during construction.
- *Mitigation Measure AIR-2:* Implement BAAQMD basic exhaust control measures during construction.

Impact CUMUL-4: Cumulative traffic increases on local and regional roads.

Cumulative projects and the Project would combine to result in a potentially significant cumulative impact at the intersection of the I-280 on-ramp and Cunningham Way. The Project's contribution to cumulative traffic impacts at the intersection of the I-280 on-ramp and Cunningham Way would potentially be significant and unavoidable due to a temporary decrease in LOS (from D to E). Implementation of Mitigation Measure TRA-1 would address this cumulatively considerable contribution by requiring traffic controls measures at the affected intersection as part of the Traffic Control Plan. However, the intersection of the I-280 on-ramp and Cunningham Way is subject to Caltrans jurisdiction and, consequently, the SFPUC lacks direct authority over the intersection. Because the SFPUC cannot ensure that Caltrans would approve traffic control measures at the intersection of the I-280 on-ramp and Cunningham Way, the EIR conservatively concludes that the project's contribution to traffic impacts at this intersection during construction could be cumulatively considerable (significant and unavoidable) (see Draft EIR pages 6-25 through 6-31).

- *Mitigation Measure TRA-1*: Prepare and implement a traffic control plan for HTWTP prior to and during project construction
- *Mitigation Measure TRA-2*: Employ a SFPUC WSIP projects construction coordinator

Impact CUMUL-5: Cumulative increases in noise.

The Project has the potential to result in significant noise impacts, including a potentially significant and unavoidable noise impact associated with the relining of the Sunset Branch pipeline. Consequently, the Project and the CS/SA Transmission Upgrade Project together have

the potential to result in a significant cumulative impact from increased ambient noise levels and inconsistency with local noise standards. In order to assess the proposed project's contribution to the cumulative noise impact, the project's contribution after implementation of project mitigation measures must be considered. Implementation of **Mitigation Measures NOI-1** (Employ noise-reducing measures during construction and limit hours of construction operation in Millbrae), **NOI-2** (Distribute public notice of planned construction to adjacent residences, Meadows Elementary School, and the Millbrae Meadows Swim Club prior to construction), **NOI-3** (Conduct worker awareness training for noise reduction prior to construction), and **NOI-4** (Prepare and implement a noise control plan prior to and during construction) as described in Section 5.6, *Noise and Vibration*, would reduce the severity of the significant impacts at the work sites to a less-than-significant level with the exception of work on the relining of the Sunset Branch pipeline. Relining of the pipeline would involve construction noise exceeding the 70 dBA speech interference threshold relative to certain residences along Helen Drive and the Meadows Elementary School and it is not feasible to fully shield the construction for this work element. In addition, the Project could be inconsistent with the Millbrae noise ordinance if relining the Sunset Branch pipeline requires nighttime construction. Thus, even with implementation of **Mitigation Measures NOI-1** through **NOI-4**, the HTWTP-related noise impact contribution at nearby residences would result in a considerable and unavoidable contribution to the cumulative noise impacts identified above (significant and unavoidable).

Night-time truck noise from the Project would exceed the 50-dBA sleep disturbance threshold along Crystal Springs Road (north of HTWTP) and Larkspur Drive/Helen Drive. The CS/SA Transmission Upgrade Project will not use Helen Drive, but will use Crystal Springs Road (north of HTWTP) and will cross Larkspur Drive near I-280. Given that the proposed project would generate nighttime truck trips related to nighttime work at HTWTP, its construction could contribute considerably to a cumulative nighttime truck haul noise impact along Crystal Springs Road (north of the HTWTP) and Larkspur Drive. With implementation of **Mitigation Measure NOI-5** (Limit heavy trucks in residential areas to 2 truck passages per hour at night), the project would limit nighttime trucks so that, by itself, it would not result in exceedance of the sleep disturbance threshold. However, since it would not be feasible to limit all nighttime trucking from all cumulative projects, the Project could still contribute truck traffic that, in combination with other construction projects, could result in a significant and unavoidable impact by resulting in cumulative exceedance of the sleep disturbance threshold. Thus, the Project, even with mitigation, could have a considerable contribution to this cumulative noise impact (significant and unavoidable). (see Draft EIR pages 6-31 through 6-34)

- *Mitigation Measure NOI-1*: Employ noise-reducing measures during construction and limit the hours of construction operation in Millbrae
- *Mitigation Measure NOI-2*: Distribute public notice of planned construction to adjacent residences, Meadows Elementary School, and the Millbrae Meadows Swim Club prior to construction
- *Mitigation Measure NOI-3*: Conduct worker awareness training for noise reduction prior to construction
- *Mitigation Measure NOI-4*: Prepare and implement a noise control plan prior to and during construction
- *Mitigation Measure NOI-5*: Limit heavy trucks in residential areas to 2 truck passages per hour during nighttime hours.

Impact CUMUL-6: Cumulative increases in emissions in the region (June 2010 BAAQMD CEQA Guidelines).

Even with implementation of **Mitigation Measures AIR-2** (Implement BAAQMD exhaust control measures during construction), which presents feasible exhaust emission control measures for NO_X, the Project's criteria air pollutant emissions would not be reduced to below the June 2010 BAAQMD CEQA threshold for NO_X. As a result, under the June 2010 BAAQMD CEQA Guidelines, the Project's contribution to significant cumulative construction air quality impacts would be considerable and unavoidable due to NO_X emissions (significant and unavoidable).

There are two areas where CS/SA Transmission Upgrade Project emissions could affect the same receptors as the Project: 1) the residences around the HTWTP and the Meadows School, which is adjacent to the HTWTP, and 2) the residences along the Crystal Springs Road (north of the HTWTP) truck/haul route. The Project would also generate DPM emissions due to work east of I-280 at the HTWTP and along Helen Drive. The CS/SA Transmission Upgrade Project's emissions in the same area as the Project could combine to create a significant cumulative air quality impact related to health risk from DPM emissions. The Project's DPM emissions are below the BAAQMD thresholds with mitigation, but occur in the context of DPM emissions from I-280 that would individually exceed the BAAQMD project and cumulative thresholds for DPM emissions for both (see Table 6-5 of the Final EIR). Consequently, even with mitigation of the Project's contribution to cumulative DPM impacts to less than significant levels, receptors Sycamore Drive (near Crestview Drive) and at the Crystal Springs Apartments (SW Building) are exposed to a significant cumulative DPM impact under the June 2010 BAAQMD Guidelines.

DPM emissions associated with construction at HTWTP would therefore have a considerable contribution to potentially significant cumulative DPM emissions due to their location less than 1,000 feet from sensitive receptors that are also affected by I-280 and by the CS/SA Transmission Upgrade Project. In addition, truck hauling associated with the project would contribute considerably to cumulative health risks along I-280 and along Crystal Springs Road and would thus be found to contribute to cumulative significant impacts using the June 2010 BAAQMD thresholds.

Mitigation Measure AIR-2 requires use of grid power instead of diesel generators where feasible, limitation of idling, and regular maintenance and tune-ups for construction equipment. **Mitigation Measure AIR-2** also requires the use of 2004 or later trucks for hauling and all on-road diesel trucks must have emissions control labels as specified in 13 CCR 2183(c), and that all off-road diesel construction equipment (with the exception of specialty equipment for which controls are not commercially available) be equipped with Tier 2 or 3 diesel engines as defined in 13 CCR 2485 and be equipped with Level 3 Diesel Emission Control Strategies as defined in 13 CCR 2700–2710. These measures would reduce the contribution of DPM emissions from construction equipment and from truck hauling to cumulative impacts. However, as noted above, BAAQMD has not identified a threshold for cumulative contributions when the cumulative threshold is exceeded. Although the equipment controls required by the mitigation identified above can reduce DPM emissions substantially, the emissions would not be entirely eliminated. Given that the existing DPM emissions from vehicle traffic on I-280 already exceed one or more of the draft BAAQMD cumulative thresholds, any additional DPM emissions would be considerable in these locations. Thus, the project, even with mitigation, would result in a considerable contribution to cumulatively significant DPM emissions if the draft thresholds are adopted (significant and unavoidable) (see Draft EIR pages 6-34 though 6-40, and C&R Section 6.2, Cumulative Impacts.

- *Mitigation Measure AIR-1:* Implement BAAQMD dust control measures during construction.
- *Mitigation Measure AIR-2:* Implement BAAQMD basic exhaust control measures during construction.

B. Water System Improvement Program 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.

However, 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. The PEIR identified that a potentially significant and unavoidable impact on fishery resources in Crystal Springs Reservoir related to inundation of spawning habitat upstream of the reservoir (PEIR Impact 5.5.5 1). The project-level fisheries analysis in the Draft EIR for the Lower Crystal Springs Dam Improvement Project ("LCSDI") (published March 2010) modified this PEIR impact determination 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. Similarly, in the Draft EIR on the Calaveras Dam Replacement Project ("CDRP") (published October 2009), it was determined that the impact related to stream flow along Alameda Creek between the diversion dam and the confluence with Calaveras Creeks (PEIR Impact 5.4.1-2) was less than significant based on more detailed, site-specific modeling and data. To be conservative, this Final EIR assumes the PEIR's significant and unavoidable impact determination for both the LCSDI and CDRP impacts, although certification of the Final EIRs for these projects may modify and supersede this conclusion.

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. Specifically, the objectives of the Project are to:

- Increase water delivery reliability.
- Improve seismic reliability.
- Maximize the use of existing SFPUC facilities and infrastructure.
- Maintain a gravity-driven system.
- Allow for timely construction of proposed facilities.

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 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.

As explained in Chapter 7 of the Draft EIR, Alternatives, the SFPUC undertook extensive efforts to identify feasible Project alternatives, including consideration of a wide range of onsite and offsite options. This process is documented in the reports and memoranda identified in Chapter 7 of the Draft EIR. The Alternatives Analysis Report (AAR) identified onsite options for the HTWTP to meet the criteria established in the WSIP and the subsequent delivery, seismic reliability, water quality and water supply goals established specifically for the HTWTP. The AAR evaluated different alternatives for raw treatment, seismic retrofit of structures and pipelines, slope stabilization, and access road improvements. The recommended options from the AAR formed the basis for the Project. A Conceptual Engineering Report described the specific improvements to be designed for the Project and considered design alternatives such as different alignments for the new pipeline carrying treated water from the new treated water reservoir to the distribution pipeline. The Alternatives to the HTWTP Long-Term Improvement Project report was prepared to determine if there were options, including offsite locations for a new water treatment plant, which did not require extensive slope stabilization measures.

Based on these reports, the Commission finds that there are no feasible alternatives that would reduce significant and unavoidable impacts of the proposed project. As described in Section 7.5, Alternatives Considered but Rejected from Further Consideration, potential alternatives failed to substantially reduce environmental impacts compared to the proposed project, would not meet project objectives, or would not be feasible from an engineering perspective. The offsite

alternatives would result in an overall increase in impacts and greater potential for significant and unavoidable impacts due to the large size of the construction site that would be needed to accommodate a new treatment plant, and the impacts of rerouting the large-diameter raw water and treated water pipelines required for treatment plant operation (refer to Section 7.5.2 of the Draft EIR). The onsite alternatives would not avoid the significant and unavoidable traffic, noise, and air quality impacts of the proposed project, because the construction activities causing these impacts would be required for all onsite alternatives.

Notwithstanding the inability of on-site alternatives to avoid the significant impacts of the Project, the Final EIR considered five on-site alternatives for the new treated water reservoir and one alternative treatment process. As described in Section 7.5 of the Draft EIR, none of these options would reduce the Project's significant and unavoidable impacts and meet most of the Project's objectives. Alternative 2, Retrofit Treated Water Reservoirs at Current Location and Maintain Direct Filtration Treatment Process, represented the best potential onsite alternative because: (1) it would reduce impacts associated with disturbing undeveloped land with trees and vegetation, impacts on existing recreation facilities on site, and impacts associated with excavation and hauling spoils off site; (2) it would meet most of the project's basic objectives; and (3) it is considered potentially feasible based on availability of infrastructure. Consequently, Alternative 2 was selected for analysis in the Draft EIR.

Similarly, as set forth in Section 7.5.2 of the Draft EIR, offsite alternatives were considered but rejected based on information developed in an engineering study of such alternatives commissioned by the SFPUC in 2008.

Alternative 1: No Project

The No Project Alternative includes those activities that would reasonably be expected to occur in the foreseeable future, if the proposed project were not approved. These activities include continued operation of the existing HTWTP with its present facilities. Additionally, under the No Project Alternative, the SFPUC would likely implement the following:

- Continue daily inspections of the HTWTP.
- Conduct post-seismic event inspections of the HTWTP and follow emergency protocols as appropriate.
- Install up to four seismic sensor and isolation valves.
- Follow emergency response procedures after a seismic event.

The No Project Alternative would not include any of the improvements or slope stabilization measures included as part of the proposed project.

Overall, the No Project Alternative would prevent all of the construction-related impacts of the proposed project because no new facilities or improvements would be constructed. However, there is the potential that the No Project Alternative would lead to future environmental impacts associated with construction of emergency supply systems (e.g., emergency bypass pipelines), transportation of emergency water supplies (e.g., trucking), and/or slope stabilization measures (i.e., greater ground disturbance and trucking) in the event of a major earthquake. Further, emergency facility repairs could potentially result in greater environmental impacts (i.e., traffic, noise, air quality, water quality, hazards, and geology and soils) compared to the proposed project because there may not be adequate time to perform studies, locate activities away from

sensitive environmental resources, and develop and administer required plans (e.g., traffic control plan, Hazardous Material Handling and Disposal Plan, dust mitigation plan, stormwater pollution prevention plan).

However, the Commission rejects this alternative as infeasible because it would not meet most of the SFPUC's Project objectives for the reasons discussed below:

The No Project Alternative would meet one of the SFPUC's project objectives (to maintain a gravity-driven system) and partially meet one objective (to maximize the use of existing SFPUC facilities and infrastructure). However, it would not meet the key objectives to increase water delivery reliability and to improve seismic reliability. The HTWTP would not meet SFPUC's WSIP level of service objectives for this facility, and the plant would continue to be unable to achieve its designed sustained treatment capacity of 140 mgd after an earthquake to meet the WSIP seismic reliability goals.

In addition, the No Project Alternative would not be consistent with SFPUC's mission of serving San Francisco and its Bay Area customers with reliable, high quality, and affordable water. Existing facilities were constructed as early as the 1920s and at the time were not sized to meet water supply needs through the year 2018, which is the SFPUC's planning horizon for the WSIP. Existing facilities do not and would not reliably or adequately serve current and future populations based on current per-capita levels of use and the potential for a prolonged drought. For instance, jurisdictions served by the SFPUC, specifically the cities of Foster City and San Mateo, have adopted Statements of Overriding Considerations for their general plans because water supply constraints were considered to be significant and unavoidable impacts in approving new development.

Alternative 2: Retrofit Treated Water Reservoirs at Current Location and Maintain Direct Filtration Treatment Process

Alternative 2 includes maintaining the current direct filtration treatment process and implementing most of the same proposed improvements as the proposed project, except the new treated water reservoir and its associated facilities would not be constructed. Instead, the existing treated water reservoirs would be retrofitted at their current locations. The purpose of Alternative 2 is to examine options for reducing construction-related traffic impacts, as well as impacts on biological resources and water quality.

Under Alternative 2, the SFPUC would retrofit the existing 8-MG and 6.5-MG reservoirs, which would involve the following:

- Structurally upgrade the existing 6.5-MG treated water reservoir with a slurry wall or steel plates.
- Structurally upgrade the existing 8-MG treated water reservoir with new pre-stressed concrete walls, ring beam, and new roof.
- Seismically retrofit the interconnection pipelines between the two existing reservoirs (i.e., install flexible couplings and vault upgrades).
- Install a continuous wall with 4 to 5 five rows of 36-inch-diameter, 220- to 280-foot-deep concrete piers to improve slope stability at the reservoir locations.

SFPUC conducted a preliminary geotechnical investigation that found implementation of slope stabilization measures needed to retrofit the existing treated water reservoir would be technically and operationally difficult. The current alignment of the existing reservoirs and piping poses engineering challenges to maintain treatment capacity, particularly when considering construction of a temporary contact basin. As listed above, slope and pipeline strengthening would require constructing drilled piers that intercept critical sliding surface, and potentially regrading the existing landslide deposit and slope near the pipelines to reduce vulnerability to

slope movements. Despite incorporating measures to reduce seismic risk, some seismic uncertainty and risk would still remain after implementation of Alternative 2 due to site conditions and location of the eastern Serra fault strand in proximity to the reservoirs.

Overall, the impacts of Alternative 2 would be similar to those associated with the proposed project, with the exception of slightly greater impacts on noise, geology and soils, and slightly lesser impacts on land use, transportation and circulation, recreation, utilities and service systems, biological resources, hazardous materials, hydrology and water quality, and energy. Alternative 2 would have slightly greater temporary noise impacts because pile-driving activities would be closer to sensitive receptors (Meadows Elementary School and residences) and greater geology and soils impacts because more slope stabilization would be required. Alternative 2 would have slightly lesser impacts on transportation, air quality, energy, and utilities because there would be less excavated spoils to haul off site; a reduced impact on land use and recreation because some of the equestrian facilities would not need to be removed to accommodate the new treated water reservoir; reduced impacts on biological resources (e.g., special-status raptors, nesting birds and western red bat, dusky-footed woodrat, and riparian corridor near El Zanjón Creek) because there would be fewer trees and vegetation disturbed; slightly reduced impacts related to hazardous materials due to a reduction in residue of lead-based paints associated with equestrian facility demolition and accidental release of hazardous materials during construction; and slightly reduced impacts on hydrology and water quality because there would be substantially less new impervious surfaces.

In addition to the environmental impacts described above, retrofitting the existing reservoirs and implementing slope stabilization measures per Alternative 2 would require an additional 1.5 to 2 years compared to the proposed project because additional time would be needed to construct each retrofit; the retrofits would have to be constructed sequentially, and that additional facility shutdowns would be required to connect the interim and upgraded facilities. Additionally, there would be increased operational disruptions due to the additional and longer duration shutdowns required for the reservoir retrofit and seismic upgrades of the interconnection pipelines. Alternative 2 would reduce the SFPUC's treated water storage capacity from 120 mgd to approximately 25 mgd during the construction period. Because at least one treated water reservoir must remain in operation at all times in order to for the plant to continue providing treated water during the retrofit, treated water reservoirs would be retrofitted one at a time, reducing the treatment capacity to approximately 25 mgd. The reduction in the treatment plant capacity would inhibit the SFPUC's ability to perform maintenance activity or meet customer delivery requirements in the event of an emergency. Also, construction of the piers for slope stabilization around the existing treated water reservoir would be technically and operationally difficult because the construction activities would disrupt normal operations, in addition to requiring lengthy shutdown periods.

Thus, although Alternative 2 would meet most of the five Project objectives, it would only partially meet the objectives to increase water delivery reliability, improve seismic reliability, and to allow for timely construction of proposed facilities for the reasons described above.

VI. STATEMENT OF OVERRIDING CONSIDERATIONS

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 these 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:

- Increase water delivery reliability.
- Improve seismic reliability of the HTWTP, generally.
- Maximize the use of existing SFPUC facilities and infrastructure, including functioning conveyance and treatment infrastructure on the HTWTP site.
- Maintain a gravity-driven water distribution system.
- Allow for timely construction of water treatment plant improvements.
- Achieve HTWTP's sustained treatment capacity of 140 mgd after an earthquake to meet WSIP seismic reliability goals and delivery emergency water supply

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.

ATTACHMENT B

PROJECT NAME AND CASE NO. *Harry Tracy Water Treatment Plant Long-Term Improvements Project, 2007.1202E*

MITIGATION MONITORING AND REPORTING PROGRAM						
			Monitoring and Reporting Program			
			Implementation and Reporting			
Impact No.	Impact Summary	Mitigation Measure	Responsible Party	Reviewing & Approval Party	Monitoring and Reporting Actions	Implementation Schedule
AESTHETICS						
AES-3	Temporary creation of new sources of light or glare from construction activities (All Project Components: PSM)	**Mitigation Measure AES-1: Implement light reduction measures** The SFPUC and its contractor will reduce lighting effects by implementing the following light reduction measures during construction. The amount of temporary exterior lighting installed will be minimized to the extent practicable. Temporary lights will be equipped with cut-off shields and directed downward and inward, away from adjacent residences.	1. SFPUC EMB 2. CM Team	1. SFPUC BEM 2. SFPUC BEM	1. Ensure that measures applying to nighttime construction lighting are incorporated in contract documents 2. Monitor to ensure that the contractor implements measures in contract documents, report noncompliance, and ensure corrective action.	1. Design 2. Construction
CULTURAL RESOURCES						
CR-1	Potential to directly or indirectly destroy paleontological resources during construction (All Project Components: PSM)	**Mitigation Measure CR-1: Conduct worker awareness training for paleontological resources prior to construction** Prior to the initiation of any site preparation and/or start of construction, the SFPUC shall ensure that all construction forepersons and field supervisors receive training overseen by a qualified professional paleontologist as defined by the SVP's Conformable Impact Mitigation Guidelines Committee (SVP Conformable Impact Mitigation Guidelines Committee, 1995) and who is experienced in teaching non-specialists, to ensure that forepersons and field supervisors can recognize fossil materials in the event that any are discovered during construction. Training on paleontological resources shall also be provided to all other construction workers, but may include videotape of the initial training and/or the use of written materials rather than in-person training by a paleontologist. Training shall identify which portions of the project (i.e., areas underlain by the Merced Formation) possess a high sensitivity for paleontological resources.	1. SFPUC EMB 2. CM Team (Paleontologist) 3. CM Team	1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM	1. Ensure that measures applying to paleontological training are incorporated in contract documents. 2. Obtain and review resume or other documentation of consulting paleontologist's qualifications. File documentation of paleontologist's qualifications (e.g. resume). 3. Ensure that training program is developed and that all personnel attend prior to beginning work and sign training sign-in sheet. Maintain file of sign-in sheets.	1. Design 2. Preconstruction 3. Preconstruction and construction
		Mitigation Measure CR-2: Conduct paleontological assessment for construction areas involving highly sensitive substrate materials The SFPUC shall require a preconstruction paleontological assessment based on final project design of construction areas overlaying substrate identified in this EIR as having high paleontological sensitivity (i.e., the Merced Formation and previously undocumented Franciscan chert [e.g., in a location where chert has not previously been identified and reported]). The assessment shall be conducted by a qualified paleontologist, as defined by the SVP Guidelines (SVP Conformable Impact Mitigation Guidelines Committee, 1995) and/or a California-registered professional geologist. The results will be documented in a report along with recommendations for appropriate and feasible procedures to avoid or minimize damage to any paleontological resources present. The report shall also make recommendations regarding the need, if any, for paleontological monitoring of ground-disturbing activities. At a minimum, the report shall recommend that a qualified paleontologist be available "on-call" to the SFPUC throughout the duration of ground-disturbing activities. The environmental review officer (ERO) shall review and approve the report in consultation with the SFPUC. Paleontological monitoring, if required, will consist of periodically inspecting disturbed, graded, and excavated surfaces. The monitor will have authority to divert grading or excavation away from exposed surfaces temporarily in order to examine disturbed areas more closely, and/or recover fossils. The monitor will coordinate with the construction manager to ensure that monitoring is	1. SFPUC EMB 2. CM Team (Paleontologist or a California registered professional geologist) 3. CM Team (Paleontologist or a California registered professional geologist)	1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM and ERO	1. Ensure that measures applying to paleontological assessment and monitoring, as may be required, are incorporated in contract documents. 2. Obtain and review resume or other documentation of consulting paleontologist's or geologist's qualifications. 3. Provide technical report to ERO that documents the results of preconstruction assessment and recommendation for paleontological monitoring. Include documentation of paleontologist's qualifications (e.g. resume).	1. Design 2. Preconstruction and Construction 3. Preconstruction

MITIGATION MONITORING AND REPORTING PROGRAM						
			Monitoring and Reporting Program			
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Impact No.	Impact Summary	Mitigation Measure	Responsible Party	Reviewing & Approval Party	Monitoring and Reporting Actions	Implementation Schedule
		thorough but does not result in unnecessary delays.				
			4. CM Team (Paleontologist or a California registered professional geologist)	4. SFPUC BEM	4. Conduct paleontological monitoring, if required. Document monitoring in monitoring logs.	4. Construction
			5. CM Team	5. SFPUC BEM	5. Ensure that the contractor implements measures in contract documents, report noncompliance, and ensure corrective action.	5. Construction
		Mitigation Measure CR-3: Implement stop work order if vertebrate fossil materials are encountered during construction If any indication of a paleontological resource is discovered during any project activity (e.g., vertebrate fossil materials or previously undocumented Franciscan chert [i.e., in a location where chert has not previously been identified and reported]), all ground-disturbing work within 50 feet of the find will stop immediately until the paleontological monitor can assess the nature and importance of the find and recommend appropriate treatment. Assessment will occur in a timely manner. Once the monitor has assessed the find, the monitor may propose modifications to the stop-work radius based on the nature of the find, site geology, and the activities occurring on the site. The monitor's recommendations shall be subject to review and approval by the ERO. Recommendations for any treatment that is required will be consistent with SVP guidelines (SVP Conformable Impact Mitigation Guidelines Committee, 1995) and currently accepted scientific practice. If required, treatment for fossil remains may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection, and may also include preparation of a report for publication describing the finds. The SFPUC will be responsible for ensuring that treatment is implemented and report to the San Francisco Planning Department. If no report is required, the SFPUC will nonetheless ensure that information on the nature, location, and depth of all finds is readily available to the scientific community through university curation or other appropriate means.	1. SFPUC EMB	1. SFPUC BEM	1. Ensure that measures applying to accidental discovery of paleontological resources are incorporated in contract documents.	1. Design
			2. CM Team	2. SFPUC BEM	2. Ensure that all potential discoveries of paleontological resources are reported as required and that the contractor suspends work in the vicinity. Mobilize a paleontologist or geologist to the area.	2. Construction
			3. CM Team (Paleontologist or a California registered professional geologist)	3. SFPUC BEM and ERO	3. Evaluate the potential discovery and advise ERO as to the significance of the discovery. Proceed with recommendations, evaluations, and implementation of additional measures in consultation with ERO. Prepare and submit Paleontological Resources Report if required.	3. Construction
CR-2	Potential disturbance of human remains during construction (All Project Components: PSM)	**Mitigation Measure CR-4: Implement treatment measures if human remains are encountered during construction** If human remains are encountered during construction, the SFPUC shall notify the San Mateo County Coroner immediately, as required by PRC Section 5097.98. A qualified archaeologist shall also be contacted immediately. If the County Coroner determines that the remains are Native American, the Coroner shall then contact the NAHC, pursuant to Section 7050.5[c] of the California Health and Safety Code. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie human remains until the San Mateo County Coroner has determined that no investigation of the cause of death is required or if the remains are Native American. If the remains are of Native American origin: • Within 24 hours of notification, the NAHC shall identify a Native American "most likely descendant" (MLD) to make a recommendation regarding appropriate treatment of the human	1. SFPUC EMB	1. SFPUC BEM	1. Ensure that contract documents include measures related to discovery of human remains.	1. Design
			2. CM Team	2. SFPUC BEM	2. Ensure that all human remains are reported as required and that contractor suspends work in the vicinity. Mobilize an archaeologist to confirm existence of human remains.	2. Construction
			3. CM Team (qualified archaeologist)	3. SFPUC BEM and ERO	3. If human remains are confirmed, perform required coordination and notifications including reporting to ERO.	3. Construction
			4. CM Team	4. SFPUC BEM	4. Monitor to ensure that the contractor implements measures in the contract	4. Construction

MITIGATION MONITORING AND REPORTING PROGRAM						
Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing & Approval Party		
		remains. • If the identified MLD fails to make a recommendation within 48 hours of being given access to the remains, the SFPUC, as the landowner, shall work with the NAHC to determine appropriate means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, as provided in PRC Section 5097.98.			documents, report noncompliance, and ensure corrective action.	
CR-3	Adverse change to unknown or known prehistoric or historic-era archaeological resources during construction (All Project Components: PSM)	**Mitigation Measure CR-5: Implement inadvertent archaeological discovery controls during construction** To avoid any potential adverse effect from the proposed project on accidentally discovered buried or submerged archaeological resources as defined in State CEQA Guidelines Section 15064.5(a)(c), the project sponsor shall distribute the San Francisco Planning Department's archaeological resource "ALERT" sheet to the project prime contractor, to any project subcontractor (including demolition, excavation, grading, foundation, pile driving, etc. firms), or to the utilities firm involved in soil disturbing activities within the project area. Prior to any soil disturbing activities being undertaken, each contractor shall be responsible for ensuring that the "ALERT" sheet is circulated to all field personnel, including machine operators, field crew, pile drivers, supervisory personnel, etc. The project sponsor shall provide the ERO with a signed affidavit from the responsible parties (prime contractor, subcontractor[s], and utilities firm) to the ERO confirming that all field personnel have received copies of the "ALERT" sheet. If, during the course of construction, a potential archaeological discovery is made, and the ERO determines that an archaeological resource may be present within the project area, the project sponsor shall retain the services of a qualified archaeological consultant. The archaeological consultant shall advise the ERO as to whether the discovery is an archaeological resource, retains sufficient integrity, and is of potential scientific/historical/cultural significance. If an archaeological resource is present, the archaeological consultant shall identify and evaluate the archaeological resource. The archaeological consultant shall make a recommendation as to what action, if any, is warranted. Based on this information, the ERO may require, if warranted, specific additional measures to be implemented by the project sponsor. Measures might include: preservation in situ of the archaeological resource, an archaeological monitoring program, or an archaeological testing program. If an archaeological monitoring program or archaeological testing program is required, program plans shall be reviewed and approved by the ERO. The ERO may also require that the project sponsor immediately implement a site security program if the archaeological resource is at risk from vandalism, looting, or other damaging actions. The project archaeological consultant shall submit an accidental discovery Archaeological Data Recovery Report (ADRR) to the ERO. In addition to the usual contents of the ADRR, this report will include an evaluation of the historical significance of any discovered archaeological resource and will describe the archaeological and historical research methods employed in the archaeological monitoring/data recovery program(s) undertaken. Information that may put at risk any archaeological resource shall be provided in a separate removable insert within the final report. Once approved by the ERO, copies of the ADRR shall be distributed as follows: the relevant CHRIS information center shall receive one copy, and the ERO shall receive a copy of the transmittal of the ADRR to the information center. The MEA shall receive three copies of the ADRR, along with copies of any formal site recordation forms (DPR 523 series) and/or documentation for nomination to the NRHP/CRHR. The SFPUC shall receive copies of the ADRR as requested in number. In instances of high public interest in or the high interpretive value of the resource, the ERO may require a different final report content, format, and distribution than that presented above.	1. SFPUC EMB 2. CM Team 3. CM Team 4. CM Team (Archaeologist)	1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM and ERO 4. SFPUC BEM and ERO	1. Ensure that measures related to archaeological discoveries are included in contract documents. 2. Ensure that all personnel attend environmental training prior to beginning work, receive "ALERT" sheet, and sign the training sign-in sheet. Maintain file of sign-in sheets. Monitor to ensure that the contractor implements measures in contract documents, report noncompliance and ensure corrective action. 3. Ensure that all potential discoveries are reported as required and that the contractor suspends work in the vicinity. Mobilize an archaeologist to the area if the ERO determines that an archaeological resource may be present. 4. Evaluate the potential discovery and advise ERO as to the significance of the discovery. Proceed with recommendations, evaluations, and implementation of additional measures in consultation with ERO. Prepare and submit Archaeological Data Recovery Report.	1. Design 2. Preconstruction and Construction 3. Construction 4. Construction

MITIGATION MONITORING AND REPORTING PROGRAM						
Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing & Approval Party		
		Mitigation Measure CR-6: Prepare archaeological monitoring plan It is possible that archaeological site CA-SMA-23 extends into the impact area. Before ground-disturbing activities are begun the project sponsor shall retain a qualified archaeological consultant who, in consultation with the ERO, shall assess the likelihood that this archaeological site may be affected by project activities. If the ERO determines that the site may be disturbed by project activities the archaeological consultant shall prepare and submit to the ERO for review and approval an Archaeological Monitoring Plan (AMP). The archaeological monitoring program shall be conducted in accordance with the approved AMP. The AMP shall specify what project activities in areas sensitive for buried resources shall be archaeologically monitored. Project activities that may require monitoring may include the installation of pipelines and crossover facilities and certain soils-altering activities such as grading and access road construction associated with construction or improvement of water storage facilities. The archaeological monitoring program shall include the following: • All project contractors shall be advised to be on the alert for evidence of the presence of the expected resource(s), of how to identify the evidence of the expected resource(s), and of the appropriate protocol in the event of apparent discovery of an archaeological resource;	1. CM Team (Archeologist) 2. SFPUC EMB 3. CM Team	1. SFPUC BEM and ERO 2. SFPUC BEM 3. SFPUC BEM	1. Archaeologist to review construction work limits and advise ERO whether archaeological site may be disturbed by construction activities. If ERO determines that the archaeological site may be disturbed, then archaeologist shall prepare and submit an Archaeological Monitoring Plan. 2. Ensure that requirements related to cultural resource protection and monitoring are included in contract documents. 3. Ensure that all personnel attend environmental training prior to beginning work and sign the training sign-in sheet. Monitor to ensure that the contractor implements measures in contract documents, report noncompliance, and ensure corrective action. Maintain file of training sign-in sheets.	1. Design 2. Design 3. Pre-construction and Construction

MITIGATION MONITORING AND REPORTING PROGRAM						
Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing & Approval Party		
		• The archaeological monitor(s) shall be present on the project site according to a schedule agreed upon by the archaeological consultant and the ERO until the ERO has, in consultation with project archaeological consultant, determined that project construction activities are unlikely to have effects on significant archaeological deposits; • The archaeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis; • If an intact archaeological deposit is encountered, all soils-disturbing activities within the area specified in the AMP of the deposit shall cease. The archaeological monitor shall be empowered to temporarily redirect demolition/excavation/pile driving/construction activities and equipment until the deposit is evaluated. The archaeological consultant shall immediately notify the ERO of the encountered archaeological deposit. The archaeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archaeological deposit, and present the findings of this assessment to the ERO. Whether or not significant archaeological resources are encountered, the archaeological consultant shall submit a written report of the findings of the monitoring program to the ERO.	4. CM Team (Archeologist)	4. SFPUC BEM and ERO	4. Perform monitoring where/when required and log monitoring activities. If intact archaeological deposit is encountered, temporarily redirect activities, immediately notify ERO. If human remains are encountered, perform required coordination and notifications. Proceed with additional measures if a significant archaeological resource is determined present. Once work in the area is finished such that monitoring is no longer required, submit written report of the findings of the monitoring program to the ERO.	4. Construction
TRANSPORTATION AND CIRCULATION						

MITIGATION MONITORING AND REPORTING PROGRAM						
			Monitoring and Reporting Program			
			Implementation and Reporting			
Impact No.	Impact Summary	Mitigation Measure	Responsible Party	Reviewing & Approval Party	Monitoring and Reporting Actions	Implementation Schedule
TRA-2	Temporary increase in traffic load on roadways caused by construction-related vehicle trips and resultant impact on roadway level of service during construction (All Project Components: SU)	**Mitigation Measure TRA-1: Prepare and implement a traffic control plan for HTWTP prior to and during project construction** The SFPUC and its construction contractor(s) will prepare and implement a traffic control plan and coordinate with Caltrans and local jurisdictions, as appropriate, for affected roadways and intersections. In the event that more than one construction contract is issued for the project, and where construction could occur within and/or across multiple streets in the same vicinity, the SFPUC and its construction contractor(s) will coordinate the traffic control plans to mitigate the impact of traffic disruption. The coordinated plan will include measures that address overlapping construction schedules and activities, truck arrivals and departures, lane closures and detours, and the adequacy of on-street staging and parking requirements. The traffic control plan shall include, but may not be limited to, the following elements: • When feasible, truck trips (haul trucks and heavy construction equipment) on Helen Drive shall be avoided during the typical school drop-off and pick up hours for Meadows Elementary School. Typically, school begins at 8:30 a.m. and ends at 2:45 p.m. (except on Wednesdays when dismissal is 1:30 p.m. and for kindergarten, which is dismissed every day at 11:50 a.m.). The construction contractor shall confirm the start and dismissal times prior to the beginning of each school year. If avoiding these hours is infeasible, the construction contractor will provide additional flaggers during school drop-off and pick-up hours near the intersections of Helen Drive/Mosswood Lane and Helen Drive/Banbury Lane (where crosswalks to the school are located) to manage traffic flow and maintain traffic safety. • When feasible, truck trips (i.e., haul trucks, heavy construction equipment) will be scheduled outside AM (7:00 a.m. to 9:00 a.m.) and PM (4:00 p.m. to 6:00 p.m.) peak commute trips. If avoiding these hours is infeasible, additional flaggers shall be provided at the intersections of Helen Drive/Mosswood Lane, Helen Drive/Banbury Lane, and Crystal Springs Road/Crestmoor Drive to manage traffic flow and maintain safety. • If the number of outbound vehicles heading to the I-280 on-ramp at Cunningham Way exceed 10 vehicles per hour during the AM peak hour, implement traffic controls such as utilizing a flagger or installing and operating a temporary traffic signal at the intersection of I-280 and Cunningham Way from 7:00 a.m. to 9:00 a.m., Monday through Friday (except legal holidays). Otherwise, the number of outbound vehicles heading to the I-280 on-ramp at Cunningham Way will not exceed 10 vehicles per hour during the AM peak hour, to the extent feasible. • "TRUCK CROSSING" signs on wood posts will be installed along the edge of Crystal Springs Road for each direction of travel, approximately 200 feet from the intersection of Crystal Springs Road and the driveway leading to the HTWTP. The signs shall be maintained by the contractor until the completion of the project. The purpose is to minimize potential conflict between the approximately 100 construction vehicles making left-turns to access the project site and the through traffic movements from the opposite direction on Crystal Springs Road. • A parking plan will be prepared that identifies off-site parking for construction workers during peak construction periods when there is not enough capacity on the HTWTP site in the staging areas and along roadways. The parking plan will identify off-site parking areas to accommodate approximately 95 vehicles. Possible off-site parking areas include off-street parking at the nearby Millbrae Meadows Swim Club and Meadows Elementary School when these facilities are not in use, off-street parking at Millbrae Intermodal Terminal, and on-street parking along Helen Drive and Crystal Springs Road. Use of the school and swim club parking lots will be coordinated with those facilities. The swim club provides the closest parking and may be available much of the year (i.e., non-summer weekdays). The school parking lot is restricted during the school year and during the relining of the Sunset Branch Pipeline. The Millbrae Intermodal Terminal has approximately 2,900 parking spaces and provides daily and	1. SFPUC EMB 2. CM Team 3. CM Team	1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM	1. Ensure that requirement to prepare a Traffic Control Plan and applicable measures are included in contract documents. 2. Ensure contractor submits a Traffic Control Plan and verify it complies with the mitigation requirements, including preparation by a qualified civil engineer. Submit to agencies for review and ensure recommendations are incorporated as appropriate. 3. Monitor to ensure that the contractor implements measures in the Traffic Control Plan and contract documents, report noncompliance, and ensure corrective action.	1. Design 2. Preconstruction 3. Construction

MITIGATION MONITORING AND REPORTING PROGRAM						
Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
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		monthly permit parking for Bay Area Rapid Transit (BART) and Caltrain riders. The use of the facility will be coordinated with BART and Caltrain. The City of Millbrae does not have parking restrictions on residential streets, except for the weekly street cleaning. However, on-street parking on Helen Drive may have limited capacity adjacent to the school, especially during the relining of the Sunset Branch Pipeline when parking is displaced from the school parking lot and Helen Drive. The contractor will provide construction workers transportation (e.g., shuttle) between the parking location and the worksite if it is not adjacent to the work site. • Prior to construction activities associated with the access pit for relining Sunset Branch Pipeline, the SFPUC or the construction contractor will provide school officials with a final 48-hour reminder notice of the timing, location, and duration of construction activities in the parking lot or roadway. (This will be a follow-up notice because the SFPUC or its construction contractor will have already coordinated with school officials regarding the construction schedule, access, and any safety concerns.) • If the access pit for relining Sunset Branch Pipeline is located in Helen Drive, the SFPUC or construction contractor will install "Road Work Ahead" warning signs and will provide SamTrans notice of the timing, location, and duration of construction activities in the Helen Drive 48 area near the Helen Drive/Mosswood Lane intersection at least 48 hours beforehand. Bus route 342 extends down this portion of Helen Drive. (Bus route 43 does not extend down the portion of Helen Drive where the access pit would be located.) • To the extent applicable, the traffic control plan will conform to Caltrans's Manual of Traffic Controls for Construction and Maintenance Work Zones. • The contractor(s) shall tailor the above listed measures to reflect site-specific traffic and safety concerns as appropriate. The specific measures in the traffic management plan may be subject to review and modification by agencies with authority over affected public streets.				
TRA-3	Temporary displacement of on-street parking and school parking during construction (All Project Components: PSM)	Implement Mitigation Measure TRA-1	--	--	--	--
TRA-4	Increased traffic safety hazards during construction (All Project Components: PSM)	Implement Mitigation Measure TRA-1	--	--	--	--
NOISE AND VIBRATION						
NOI-1	Temporary increase in ambient noise levels on and around the project area during construction (All Project Components Excluding Sunset Branch Pipeline: PSM, Sunset Branch Pipeline: SU)	**Mitigation Measure NOI-1: Employ noise-reducing measures during construction and limit hours of construction operation in Millbrae** The project contractor will be required to implement appropriate noise controls to reduce construction noise levels at noise-sensitive uses including residences, the Meadows Elementary School, and the Millbrae Meadows Swim Club, such that construction noise does not exceed the following (as measured at the exterior of the closest sensitive receptor) for all project components, except along the Sunset Branch pipeline in Millbrae where these measures shall be implemented to the extent feasible:	1. SFPUC EMB 2. CM Team	1. SFPUC BEM 2. SFPUC BEM	1. Ensure that noise control requirements are included in contract documents. 2. Ensure that the contractor implements noise control requirements including a noise control plan, as required by MM NOI-4, and that performance standards are met to the extent feasible. Report noncompliance, and ensure corrective action.	1. Design 2. Construction

MITIGATION MONITORING AND REPORTING PROGRAM						
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			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
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		• 70 dBA(L_{eq}) between 7 a.m. and 7 p.m., Monday through Friday. • 50 dBA(L_{eq}) during normal sleeping hours, which are considered to be 7:00 p.m. to 7:00 a.m (where the ambient noise level exceeds 50 dBA noise from construction activity may not increase the ambient noise level by more than 3 dB).				

		The project contractor will determine the specific methods to meet the performance standards given above. Specific measures that can be implemented to comply with these performance standards include, but are not limited to, the following:
		• Use best available noise control techniques (including mufflers, intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds) for all equipment and trucks to minimize construction noise impacts.
		• When pneumatically powered tools are used, use an exhaust muffler on the compressed air exhaust (a muffler can lower noise levels from the exhaust by as much as about 10 dBA). Use external jackets on the tools themselves, which could achieve a reduction of 5 dBA.
		• Use alternative pile placement and pile-driving noise reduction methods where necessary to meet the performance standards in place of or in addition to impact pile driving. Examples of alternative pile placement methods include:
		  • Sonic pile drivers (sonic pile drivers are only effective in some soil types),
		  • Pre-drilled pile holes,
		  • Cast-in-place piles,
		  • Non-displacement piles (i.e., "H" piles),
		  • Non-impact drivers that use torque and down-pressure or static loading to press piles into place,
		  • Pile cushioning (placing resilient material between hammer and pile), and
		  • Shrouding.
		• Operation of equipment requiring use of back-up beepers will be avoided near sensitive receptors (e.g., residences) to the extent practical during nighttime, evening, and weekend hours. Where such avoidance is impractical, the need for construction vehicles to engage the reverse gear will be minimized (minimizing noise generated by backup alarm) as necessary in order to meet the performance.
		• Locate stationary noise sources as far from sensitive receptors (e.g., residences, Meadows Elementary School) as practical. If they must be located near receptors, noise attenuation such as enclosures will be used to ensure compliance with the performance standards. Enclosure openings or venting will be faced away from noise-sensitive receptors.
		• Erect temporary noise barriers (at least as high as the exhaust of equipment and breaking line-of-sight between noise sources and sensitive receptors) to maintain construction noise levels at or below the performance standards. Barriers shall be constructed with a solid material that has a density of at least 4 pounds per square foot with no gaps from the ground to the top of the barrier. Barriers are most effective where they are close to the source or close to the				

MITIGATION MONITORING AND REPORTING PROGRAM						
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		receiver. Effective locations for barriers to reduce noise from staging areas include the southeast edge of the staging area adjacent to Sycamore Drive and the northeast and southeast edges of the staging area adjacent to Helen Drive. **Figure 5.6-6** shows potential barrier locations. In addition to meeting the performance standards identified above, the contractor shall be prohibited from conducting pile driving activities during the evening and nighttime hours (6:00 p.m. to 7:00 a.m., Monday through Friday); pile driving shall not be allowed on Saturday and Sundays. Any construction work conducted within the City of Millbrae will be limited to the hours specified in the City's noise ordinance (Monday through Friday, 7:30 a.m. to 7:00 p.m., Saturday, 8:00 a.m. to 6:00 p.m., and Sundays and holidays, 9:00 a.m. to 6:00 p.m.) to the extent feasible.				
		Mitigation Measure NOI-2: Distribute public notice of planned construction to adjacent residences, Meadows Elementary School, and the Millbrae Meadows Swim Club prior to construction Prior to beginning construction, the SFPUC shall contact the Meadows Elementary School in person or by phone to review project scope and subsequently shall send out notices containing the proposed start date, construction updates, and contact information for reporting complaints related to noise. Residences east of I-280 within 1,000 feet of the project area and the Millbrae Meadows Swim Club will also be notified similarly by mail or email. They shall also be invited to a preconstruction informational meeting with the contractor.	1. SFPUC EMB 2.SFPUC Communications	1. SFPUC BEM 2. SFPUC BEM	1. Ensure that noticing requirements are included in contract documents. 2. Distribute public notices as required. Designate project liaison responsible for responding to noise complaints. As necessary, develop a reporting program for complaints received. Maintain records of notices.	1. Design 2. Preconstruction and Construction
		Mitigation Measure NOI-3: Conduct worker awareness training for noise reduction prior to construction The SFPUC will ensure that the contractor conducts worker training for all new employees to encourage workers during late night shifts to do the following: be mindful of the residential neighborhood, avoid revving or unnecessary idling of vehicle engines, avoid arming car alarms while at the construction site, and avoid loud conversations. The contractor shall provide documentation to the SFPUC indicating that all new employees received the training and have signed a training sign-in sheet provided by the SFPUC confirming their agreement to comply with these measures.	1. SFPUC EMB 2. CM Team	1. SFPUC BEM 2. SFPUC BEM	1. Ensure that training requirements are included in contract documents. 2. Ensure that training program is developed and that all personnel attend prior to beginning work and sign training sign-in sheet. Maintain file of sign-in sheets.	1. Design 2. Preconstruction and construction
		Mitigation Measure NOI-4: Prepare and implement a Noise Control Plan prior to and during construction The SFPUC will ensure that construction-contract specifications include a requirement that the contractor submit to the SFPUC for review and approval, at least 28 days prior to commencing construction, a Noise Control Plan prepared by a qualified noise consultant, which is defined as a ~~Board-Certified Institute of Noise Control Engineering member or other qualified consultant or~~ engineer approved by the project engineer. The SFPUC will verify that the Noise Control Plan contains at least the following elements: • Detailed list of potential noise control methods, which are to be implemented to achieve the noise performance standards where practical. Areas where achieving the performance standards are not practical will be identified. • Proposed staging and scheduling of noise control measures. • Noise control methods/management practices to reduce noise levels during shift changes.	1. SFPUC EMB 2.SFPUC Communications 3. CM Team 4. CM Team	1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM 4. SFPUC BEM	1. Ensure that requirement to prepare a noise control plan is included in contract documents. 2. Designate project liaison responsible for ~~responding to noise complaints. As~~ necessary, develop a reporting program for complaints received. Maintain records of notices. 3. Ensure that contractor prepares and submits a noise control plan that complies with mitigation measure. 4. Ensure that the contractor implements	1. Design 2. Preconstruction and Construction 3. Preconstruction 4. Construction

MITIGATION MONITORING AND REPORTING PROGRAM						
Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
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		• Anticipated performance of noise control measures. • Schedule and plan to document the existing baseline noise levels at the adjacent residential property lines. The baseline 30-minute L_{eq} and L_{dn} at locations along the SFPUC property line shall be documented for a minimum two-week period before construction begins.			measures in noise control plan and contract documents, and that performance standards listed in MM NOI-1 are met to the extent feasible. Report noncompliance, and ensure corrective action.	
		• Number and location of monitoring locations and relation to stationary noise controls. • Schedule for tests to confirm the construction noise levels and effectiveness of noise control measures. • Schedule for on-going monitoring and reporting of construction noise levels to meet performance standards. Monitoring shall occur at least weekly, or more often if needed, in response to complaints. • Location of equipment, parking, and other noise generating sources. In addition SFPUC will assign a designated project liaison to be responsible for responding to noise complaints during the construction phases. The name and phone number of the liaison will be conspicuously posted at construction areas and on all advanced notifications. This person will take steps to resolve complaints, including periodic noise monitoring, if necessary. Results of noise monitoring will be presented at regular project meetings with the project contractor, and the liaison will coordinate with the contractor to modify any construction activities that generated excessive noise levels. A reporting program will be required that documents complaints received, actions taken to resolve problems, and effectiveness of these actions. In the event that complaints are received regarding noise, the contractor shall address them as received and provide information to the SFPUC within 48 hours of being notified of the complaint, regarding the noise levels measured and activities that correspond to the complaints. These noise levels shall be compared to the information provided in the Noise Control Plan; and, if necessary, the effectiveness of implemented noise control measures shall be verified by the contractor. The contractor shall be responsible for ensuring that all implemented noise control measures are installed and used correctly, and that the construction activities are in compliance with the project noise specifications. In the event that the thresholds are exceeded, the contractor shall work to reduce noise levels immediately and provide information to the SFPUC within 48 hours of the exceedance, identifying the source of the exceedance (e.g., unusually noisy method, broken muffler, emergency repair) and identifying the corrective actions that are being taken to reduce the noise.				
NOI-2	Exposure of people to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (All Project Components Excluding Sunset Branch Pipeline: PSM, Sunset Branch	Implement Mitigation Measures NOI-1, NOI-2, NOI-3, and NOI-4	--	--	--	--

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MITIGATION MONITORING AND REPORTING PROGRAM						
			Monitoring and Reporting Program			
			Implementation and Reporting			
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	Pipeline: SU)					
NOI-3	Temporary increase in traffic noise along public roadways from construction-related vehicles (All Project Components: PSM)	**Mitigation Measure NOI-5: Limit heavy trucks in residential areas to 2 truck passages per hour during nighttime hours** The SFPUC will limit heavy trucks in residential areas to 2 truck passages per hour during nighttime hours (7:00 p.m. to 7:00 a.m.)	1. SFPUC EMB 2. CM Team	1. SFPUC BEM 2. SFPUC BEM	1. Ensure that nighttime truck limitations are included in contract documents. 2. Monitor to ensure that the contractor implements measures in contract documents, report noncompliance, and ensure corrective action.	1. Design 2. Construction
AIR QUALITY						
AIR-1	Construction emissions of criteria pollutants (All Project Components: SU)	**Mitigation Measure AIR-1: Implement dust control measures during construction** **BAAQMD Basic Construction Mitigation Measures.** The SFPUC or its construction contractor shall implement the following BAAQMD basic control measures to reduce fugitive PM emissions from construction activities (from Table 8-2 in the June 2010 BAAQMD CEQA Guidelines). The SFPUC shall ensure the contract specifications include the following basic control measures: • All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. • All haul trucks transporting soil, sand, or other loose material off-site shall be covered. • All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. • All vehicle speeds on unpaved roads shall be limited to 15 mph. • All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. • Post a publicly visible sign with the telephone number and person to contact at the SFPUC regarding dust complaints. This person shall respond and take corrective action within 48 hours. The phone number of the BAAQMD shall also be visible to ensure compliance with applicable regulations. **BAAQMD Additional Construction Mitigation Measures.** In accordance with the last bulleted item, above, the SFPUC will assign a designated project liaison responsible for coordinating a response to dust and air quality complaints during the construction phases of the project. The name and phone number of the liaison will be conspicuously posted at construction areas and on all advanced notifications to area residents. If a complaint is received, the project liaison will report the complaint to the environmental inspector, the SFPUC, and the contractor. This person will coordinate with said parties to resolve the complaint, which may involve periodic monitoring of fugitive dust levels and modification of any construction conditions that may have generated excessive fugitive dust. Results of any corrective actions, including fugitive dust monitoring results, will be presented at regular project meetings with the project contractor and reported to the environmental inspector. A reporting program will be required that documents complaints received, actions taken to resolve problems, and effectiveness of these actions. Similarly, if the environmental inspector observes excessive or unusually high levels of fugitive dust, he or she shall take the same steps as outlined above. In the event of a complaint from a member	1. SFPUC EMB 2. CM Team	1. SFPUC BEM 2. SFPUC BEM	1. Ensure that all required dust control measures are included in contract documents. 2. Assign a designated project liaison responsible for coordinating a response to dust and air quality complaints during the construction phases of the project Conspicuously post the name and phone number of the liaison at construction areas and on all advanced notifications to area residents. Monitor to ensure that the contractor implements measures in contract documents (whether complaints are received or not), report noncompliance and received complaints to the environmental inspector. Report on corrective actions taken and their effectiveness. Consult with BAAQMD as necessary to address persistently excessive dust conditions.	1. Design 2. Construction

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		of the public or observation of high dust levels by the environmental inspector, the contractor shall provide information to the SFPUC within 48 hours regarding the activities or conditions that correspond to the complaints (including the dust levels measured, if applicable), as well as the corrective actions that were implemented. If, in the estimation of the SFPUC and the environmental inspector, in consultation with the BAAQMD, excessive dust conditions persist, the contractor shall implement additional, site-specific dust control measures as necessary to address the dust conditions. These site-specific measures may include the following or equivalent measures that accomplish the goal of minimizing fugitive dust, which are based on the BAAQMD's Additional Construction Mitigation Measures (from Table 8-3 in the June 2010 BAAQMD CEQA Guidelines): • All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe. • All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph. • Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity. • Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established. • The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time. • All trucks and equipment, including their tires, shall be washed off prior to leaving the site. • Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel. • Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent. • Exposed stockpiles (dirt, sand, etc.) shall be enclosed, covered, and watered, or nontoxic soil binders shall be applied.				
		Mitigation Measure AIR-2: Implement exhaust control measures during construction **BAAQMD Basic Measures.** The SFPUC shall implement the following current BAAQMD-recommended control measures to reduce exhaust emissions of DPM from construction activities (from Table 8-2 in the June 2010 BAAQMD CEQA Guidelines). The SFPUC shall ensure the contract specifications include the following measures, where applicable. • Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. • All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.	1. SFPUC EMB 2. CM Team	1. SFPUC BEM 2. SFPUC BEM	1. Ensure that all required BAAQMD exhaust control measures detailed in MM AIR-2 are included in contract documents, including monthly submittal of maintenance log and a plan for demonstrating project-wide fleet-average 20% NO_X reduction and 45% PM reduction for off-road equipment, as compared to the most recent CARB fleet average. 2. Monitor to ensure that the contractor implements measures in contract documents including monthly submittal of maintenance log, report noncompliance, and ensure	1. Design 2. Construction

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		BAAQMD Additional Measures. The SFPUC shall implement the following current BAAQMD control measures to reduce exhaust emissions of PM from construction activities (from Table 8-3 in the June 2010 BAAQMD CEQA Guidelines). The SFPUC shall ensure the contract specifications include the following measures, where applicable. • Minimizing the idling time of diesel powered construction equipment to two minutes. • Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings). • Requiring that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NO_X. • Requiring all contractors use equipment that meets CARB's most recent certification standard for off-road heavy duty diesel engines. • The project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project-wide, fleet-average 20 percent NO_X reduction and 45 percent PM reduction compared to the most recent CARB fleet average. Acceptable options for reducing emissions include the use of late-model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as such become available. The technical requirements above for off-road diesel equipment may be used to satisfy the performance standards noted above, but the technical requirements are mandatory regardless of whether they may result in greater reductions than the performance standards (due to the level of DPM-related health risks). **Other Measures.** The SFPUC shall implement the following additional control measures, which are not identified in the BAAQMD Guidelines, to reduce exhaust emissions from construction activities. The SFPUC shall ensure the contract specifications include the following additional control measures, where applicable. • Grid power will be used instead of diesel generators at all construction sites where it is feasible to connect to grid power. • In contract specifications, all WSIP contracts specifications shall include Sections 2480 and 2485, Title 13, California Code of Regulations, which limit the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds, both California- or non-California-based trucks) to 30 seconds at a school or five minutes at any location. In addition, the use of diesel auxiliary power systems and main engines shall be limited to five minutes when within 100 feet of homes or schools while the driver is resting. Idling time of diesel powered construction equipment shall be limited to 2 minutes.			corrective action.	719
		• In contract specifications, all WSIP contracts specifications shall include Section 93115, Title 17, California Code of Regulations, Airborne Toxic Control Measure for Stationary Compression Ignition Engines, which specifies fuel and fuel additive requirements; emission standards for operation of any stationary, diesel-fueled, compression-ignition engines; and operation restrictions within 500 feet of school grounds when school is in session. • A schedule of low-emissions tune-ups shall be developed and such tune-ups shall be performed on all equipment, particularly for haul and delivery trucks. A log of required tune-ups shall be maintained and a copy of the log shall be submitted to the SFPUC on a monthly basis				

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		for review. • Low-sulfur fuels shall be used in all stationary and mobile equipment. • The SFPUC shall ensure that construction contract specifications include a requirement that on-road diesel trucks used to transport spoils consist of 2004 or newer model-year trucks with factory-built engines. All on-road diesel trucks shall be required to have emission control labels as specified in 13 CCR 2183(c). The construction contract specifications shall require that the contractor submit to the SFPUC a comprehensive inventory of all on-road trucks used to haul spoils. The inventory shall include each vehicle's license plate number, the engine production year, and a notation of whether the truck is in possession of an emission control label as defined in 13 CCR. The contractor shall update the inventory and submit it monthly to the SFPUC throughout the duration of the project. • The SFPUC shall ensure that construction contract specifications include a requirement that all off-road diesel construction equipment is equipped with Tier 2 or 3 diesel engines as defined in 40 CFR Part 89 and are equipped with Level 3 Diesel Emission Control Strategies as defined in 13 CCR 2700–2710. The construction contract specifications shall require the contractor to submit a comprehensive inventory of all off-road construction equipment that will be used an aggregate of 8 hours or more during any portion of project construction. The inventory shall include each vehicle's license plate number, horsepower rating, engine production year, and projected hours of use or fuel throughput for each piece of equipment. The contractor shall update the inventory and submit it monthly to the SFPUC throughout the duration of the project.				
AIR-2	Exposure to diesel particulate matter during construction (All Project Components: PSM)	Implement Mitigation Measures AIR-2	--	--	--	--
UTILITIES AND SERVICE SYSTEMS						
UTL-1	Potential temporary damage to or disruption of existing utilities during construction (All Project Components: PSM)	**Mitigation Measure UTL-1: Locate utility lines and coordinate with utility providers prior to construction, and ensure prompt reconnection of utilities disrupted during construction** Prior to excavation, the SFPUC or its contractors shall locate overhead and underground utility lines, such as electricity, natural gas, telephone, fuel, and water lines, that may be encountered during excavation work prior to opening an excavation. The exact location of underground utilities shall be determined by safe and acceptable means. Information regarding the size and location of existing utilities must be confirmed before construction activities commence. The SFPUC or its contractors shall coordinate final construction plans and specifications with affected utilities. The SFPUC or its contractors shall allow inspectors from PG&E and any other affected utilities access in and around SFPUC facilities during construction. The SFPUC or its contractors shall promptly reconnect any disconnected utility lines.	1. SFPUC EMB 2. CM Team	1. SFPUC BEM 2. SFPUC BEM	1. Ensure that utility location confirmation and utility disruption controls are included in contract documents 2. Monitor to ensure that contractor implements measures, report noncompliance, and ensure corrective action.	1. Design 2. Preconstruction and construction
		Mitigation Measure UTL-2: Develop and implement worker safety provisions for excavation near natural gas pipelines prior to and during construction SFPUC or its contractors will ensure that construction near natural gas pipelines will proceed in compliance with Cal-OSHA regulations and their construction safety orders. The SFPUC will verify	2. SFPUC EMB	2. SFPUC BEM	1. Ensure that worker safety provisions are included in contract documents	1. Design

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		that any construction worker health and safety provisions required as a result of construction near natural gas pipelines are incorporated into the Hazardous Material Handling and Disposal Plan (HMHDP) for the proposed project, which is discussed further under **Mitigation Measure HAZ-2** in Section 5.13, *Hazards and Hazardous Materials*, The HMHDP will include all necessary procedures to ensure that excavated soils are stored, managed, and disposed of in a manner protective of human health and in accordance with applicable laws and regulations.	2. CM Team	2. SFPUC BEM	2. Monitor to ensure that contractor implements measures, report noncompliance, and ensure corrective action.	2. Preconstruction and construction
		Implement Mitigation Measure HAZ-2	--	--	--	--
UTL-3	Potential non-compliance with federal, state, and local solid waste regulations (All Project Components: PSM)	**Mitigation Measure UTL-3: Develop and implement a waste management plan and spoils diversion plan** The SFPUC or its contractors shall ensure that (a) 100 percent of inert solids, and at least 50 percent of the remaining construction and demolition debris tonnage be diverted from local landfills, and that (b) the contractor develop a Waste Management Plan that includes at least: • Salvaging all or part of structures where practicable; • Having 100 percent of inert solids (i.e., asphalt, concrete, rock, stone, brick, sand, soil and fines) be reused or recycled at approved facilities, such as the Ox Mountain Sanitary Landfill and the Newby Island Resource Recovery Park; and • Source separating all other materials, such as cardboard and paper, wood, metals, green waste, new gypsum wallboard, tile, porcelain fixtures, and other easily recycled materials, and directing at least 50 percent (by weight) to recycling facilities approved by San Mateo County and taking the remainder (but no more than 50 percent by weight) to a facility for disposal, or taking all mixed construction and demolition debris to an approved facility, such as the Zanker Road Landfill and the Newby Island Resource Recovery Park, for reuse or recycling. The SFPUC or its contractors shall also develop and implement a Spoils Diversion Plan that shall: • Assess the capacity, current processing rate, and volume of existing and nearby construction and demolition debris recycling facilities, such as the Zanker Road Landfill and the Newby Island Resource Recovery Park; • Describe the manner in which it will schedule and conduct its construction and demolition operations such that the volume and rate of diverted or recycled construction and demolition debris tonnage does not exceed the existing capacity of the staging areas on the HTWTP site and the local and nearby diversion and recycling facilities; and • Be consistent with County of San Mateo Ordinance 04099 diversion requirements (http://www.recycleworks.org/con_dem/or_04099.html).	1. SFPUC EMB 2. CM Team 3. CM Team	1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM	1. Ensure that waste management plan and spoils diversion plan requirements are included in contract documents. 2. Ensure that contractor prepares and submits a waste management plan and spoils diversion plan in compliance with mitigation measure. 3. Monitor to ensure that the contractor implements measures in Waste Management Plan and Spoils Diversion Plan and contract documents, report noncompliance, and ensure corrective action.	1. Design 2. Preconstruction 3. Construction
BIOLOGICAL RESOURCES						
BIO-1	Potential adverse effects on special-status raptors during construction (All Project Components: PSM)	**Mitigation Measure BIO-1: Prepare a biological resources awareness program for construction workers, and implement prior to and during construction** The SFPUC shall ensure that a biological resources awareness training is provided to all construction personnel as follows: • The training shall be developed and provided by a qualified biologist familiar with the sensitive species that may occur in the study area. The training program shall be reviewed and approved by the SFPUC prior to implementation if prepared by a consulting biologist. • Training materials shall be language-appropriate for construction personnel. • The training shall provide educational information on sensitive habitats and the natural history	1. SFPUC EMB 2. CM Team (Biologist) 3. CM Team	1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM	1. Ensure requirement to attend training is included in the contract documents. 2. Obtain and review resume or other documentation of consulting biologist's qualifications developing training program. Also, review and approve biological resources awareness program developed by consulting biologist prior to its implementation. 3. Monitor to ensure that contractor implements measures in contract document,	1. Design 2. Preconstruction 3. Preconstruction and Construction

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		of the special-status species potentially occurring in the study area, a discussion of required mitigation measures to avoid impacts on the special-status species, and a discussion of penalties for noncompliance with biological mitigation requirements. • The training shall be provided to all construction workers before construction begins. If new construction personnel are added to the project later, the contractor shall ensure that new personnel receive training before they start working. The subsequent training of personnel can include videotape of the initial training and/or the use of written materials approved by a qualified biologist rather than in-person training by a biologist.			report noncompliance, and ensure corrective action. Maintain file of sign-in sheets.	
		Mitigation Measure BIO-2: Conduct preconstruction surveys for special status raptor nests SFPUC and their contractors will implement the following measures to protect special-status raptor nests, including sharp-shinned hawk and Cooper's hawk, during construction: • A survey to identify unoccupied or active nests will be conducted by a qualified biologist no more than 2 weeks before the start of construction at project sites from February 15 through September 15. • Active raptor nests located within 500 feet of the study area will be mapped, to the extent allowed by access. On the southwestern side of the project area, active raptor nest surveys and mapping will extend to the edge of I-280 and its off ramps. • If an active raptor nest is found within 500 feet of the project footprint, a determination will be made by a qualified biologist, in consultation with CDFG, as to whether or not construction work will affect the active nest or disrupt reproductive behavior. • If it is determined that construction will not affect an active nest or disrupt breeding behavior, construction will proceed without any restriction or mitigation measure. • If it is determined that construction will affect an active raptor nest or disrupt reproductive behavior, then construction activities will be reduced or delayed within 300 feet of such a nest or as otherwise approved by CDFG based on site specific conditions, until a qualified biologist determines that the subject raptors are not nesting or until any juvenile raptors are no longer using the nest as their primary day and night roost.	1. SFPUC EMB 2. CM Team (Biologist) 3. CM Team	1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM	1. Ensure that contract documents include requirement for Contractor to provide advance notification to SFPUC of construction activities to allow SFPUC to perform preconstruction surveys. 2. Obtain and review resume or other documentation of consulting biologist's qualifications. Conduct preconstruction biological surveys and construction biological monitoring and related activities (e.g., establishing buffer zones, agency consultation, etc.). Document monitoring activities in logs. Consult with CDFG as required. 3. Monitor to ensure that the contractor implements measures in contract documents, report noncompliance, and ensure corrective action.	1. Design 2. Preconstruction and Construction 3. Construction
BIO-2	Potential adverse effects on nesting migratory birds during construction (All Project Components: PSM)	**Mitigation Measure BIO-3: Conduct preconstruction surveys for migratory bird nests** To avoid loss of active nests and potential mortality of juvenile migratory birds, SFPUC and their contractors shall ensure that trees and shrubs are removed or trimmed only during the nonbreeding season (generally between September 15 and February 15 for most migratory birds that frequent the study area). Removing woody vegetation during the nonbreeding season shall ensure that active nests are not destroyed by removal of trees supporting or adjacent to active nests. In addition, SFPUC shall ensure that the following actions are implemented: • If construction activity begins during the migratory bird breeding season (February 15 to September 15), a preconstruction survey for nests and nesting birds will be conducted within 2 weeks prior to initiation of construction activities. The survey will be conducted by qualified biologists and will cover all forest, woodland, and scrub habitats in the construction limits and all suitable habitats within 50 feet of the construction limits. Because construction at individual project locations may occur at different times, surveys will be conducted in each individual construction area prior to construction at that location. Additionally, if there are any breaks in	1. SFPUC EMB 2. CM Team (Biologist)	1. SFPUC BEM 2. SFPUC BEM	1. Ensure that contract documents include requirement for Contractor to provide advance notification (at least one week) to SFPUC of construction activities to allow SFPUC to perform preconstruction surveys. 2. Obtain and review resume or other documentation of consulting biologist's qualifications. Conduct preconstruction biological surveys and construction biological monitoring and related activities (e.g., establishing buffer zones, agency consultation, etc.). Document monitoring	1. Design 2. Preconstruction and Construction

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		construction activity at any site for 2 weeks or more, surveys would be conducted again in adjacent habitats to ensure that no active nests or nesting birds have taken up residence adjacent to project sites. • If no active nests are detected during surveys, then no additional mitigation is required. • If active nests are detected within 50 feet of any construction site, a determination will be made by the wildlife biologist, in consultation with CDFG, as to whether noise or other construction activities would adversely affect the active nests or disrupt nesting behaviors. If it is determined that construction would not impact the nests or nesting behavior, then construction may proceed with no restrictions or further mitigation. If it is determined that construction would impact the nests or nesting behavior, then construction activity within 50 feet of the nests will be reduced or delayed until the wildlife biologist determines that the young have fledged unless otherwise approved by CDFG. • If construction activities begin between September 15 and February 15 (prior to the breeding season), then construction can proceed. Construction activities in this instance must remain consistently implemented including ground disturbance and vegetation removal on the entire project site. A minor activity that initiates construction but does not involve the full force of construction activities will not qualify as "pre-existing construction." If any birds or raptors nest in the vicinity of the project under a pre-existing construction condition, then it is assumed that they are or will habituate to the construction activities. Under this scenario, the preconstruction survey will still be conducted on or after March 1 to identify any active nests in the vicinity, and active sites will be monitored by a wildlife biologist periodically until after the breeding season or after the young have fledged. If active nests are identified on or immediately adjacent to the project site, then all nonessential construction activities (e.g., equipment storage, meetings) in the immediate vicinity of the nest site will be avoided unless otherwise approved by CDFG; however, construction activities can proceed.	3. CM Team	3. SFPUC BEM	activities in logs. Consult with CDFG as required. 3. Monitor to ensure that the contractor implements measures in contract documents, report noncompliance, and ensure corrective action.	3. Construction
		Implement Mitigation Measure BIO-1	--	--	--	--
BIO-3	Potential adverse effects on western red bat during construction (All Project Components: PSM)	**Mitigation Measure BIO-4: Conduct preconstruction surveys for western red bats** Within two weeks prior to tree removal, a qualified biologist (i.e., familiar with identification of bats and sign of bats) will look for signs of roosting bats in the trees to be removed. Bats may be present any time of the year. The biologist will thoroughly search trees that provide appropriate roosting habitat for bats (trees with foliage, cavities, or that are hollow) for bats or evidence of bats. If no roosting bats or evidence of bats are found, removal of trees may proceed. If bats are found or evidence of use by bats is present, trees will be mapped and marked with flagging. SFPUC will ensure that the trees are not removed until CDFG has been consulted for guidance on measures to avoid and/or minimize disturbance of the bats. Measures may include monitoring trees and excluding bats from a tree until it is removed and/or timing of tree removal and use of a construction buffer to avoid breeding disturbance.	1. SFPUC EMB	1. SFPUC BEM	1. Ensure that contract documents include requirement for Contractor to provide advance notification (at least one week) to SFPUC of construction activities to allow SFPUC to perform preconstruction surveys.	1. Design
			2. SFPUC BEM (Biologist)	2. SFPUC BEM	2. Obtain and review resume or other documentation of consulting biologist's qualifications. Conduct preconstruction biological surveys and construction biological monitoring and related activities (e.g., tree removal requirements, relocation, etc.). Document monitoring activities in logs. Consult with CDFG as required.	2. Preconstruction and Construction
			3. CM Team	3. SFPUC BEM	3. Monitor to ensure that the contractor implements measures, report noncompliance, and ensure corrective action.	3. Construction
		Implement Mitigation Measure BIO-1	--	--	--	--

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MITIGATION MONITORING AND REPORTING PROGRAM						
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BIO-4	Potential adverse effects on San Francisco dusky-footed woodrat (All Project Components: PSM)	**Mitigation Measure BIO-5: Conduct preconstruction surveys for San Francisco dusky-footed woodrat nests** The SFPUC shall ensure that a qualified biologist conducts a survey for woodrat middens (i.e., nests) in areas where construction will involve surface disturbance or vegetation removal. This survey must be conducted early enough prior to site clearing to address any middens requiring removal before construction.	1. SFPUC EMB	1. SFPUC BEM	1. Ensure that contract documents include requirement for Contractor to provide advance notification (at least one week) to SFPUC of construction activities to allow SFPUC to perform preconstruction surveys and other applicable requirements.	1. Design
		• If no middens are found within such areas, no further action is required. • If middens are found and can be avoided, the biologist shall direct the contractor in placing orange barrier fencing between the proposed construction clearing and the midden, allowing as much room as possible to avoid indirect disturbance to the midden, but no less than 2 feet from and along the construction side of the middens to protect them from construction activities. • If the minimum fencing distance cannot be achieved and the middens cannot be protected and/or avoided, a qualified biologist shall disassemble middens or, if adjacent habitat is not suitable, trap and relocate woodrats out of the construction area (using live-traps) prior to the start of construction. In addition, the biologists shall attempt to relocate the disassembled midden to the same area where the woodrats are released. If young are present during disassembling, discontinue disassembling and inspect every 48 hours until young have relocated. The midden may not be fully disassembled until the young have left.	2. CM Team (Biologist) 3. CM Team	2. SFPUC BEM 3. SFPUC BEM	2. Obtain and review resume or other documentation of consulting biologist's qualifications. Conduct preconstruction biological surveys and construction biological monitoring and related activities (e.g., exclusion fencing, relocation of disassemble midden). Document monitoring activities in logs. 3. Monitor to ensure that the contractor implements measures in contract documents, report noncompliance, and ensure corrective action.	2. Preconstruction and Construction 3. Construction
		Implement Mitigation Measure BIO-1	--	--	--	--
BIO-5	Potential adverse effects on jurisdictional waters and riparian habitat from construction activities (All Project Components: PSM)	Implement Mitigation Measure HYD-1	--	--	--	--
BIO-6	Potential inconsistencies with local policies or ordinances protecting biological resources including tree ordinances (All Project Components: PSM)	**Mitigation Measure BIO-6: Conduct a tree survey and protect significant trees and heritage trees** SFPUC will avoid and minimize impacts on significant and heritage trees by implementing the following measures: • A tree survey will be conducted prior to construction by a qualified arborist (defined as an International Society of Arboriculture certified arborist or a consulting arborist who is a member of the American Society of Consulting Arborists) or a qualified biologist to identify significant and heritage trees within the project footprint. Significant trees are defined as trees with a circumference of 38 inches or larger (which is equivalent to 12 inches diameter at breast height). Heritage trees are defined as any of the tree species and sizes listed below. **Tree Species** — **Diameter at Breast Height** *Acer macrophyllum*—Bigleaf Maple — >36 inches west of Skyline Boulevard or >28 inches east of Skyline Boulevard.	1. SFPUC EMB 2. SFPUC BEM (qualified arborist) 3. CM Team	1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM	1. Ensure that requirements related to protection of heritage and significant trees are included in contract documents including requirement for contractor to provide certified arborist. 2 Obtain and review certified arborist's qualifications. 3. Monitor to ensure that the contractor implements protection measures for heritage trees and significant trees, report noncompliance, and ensure corrective action.	1. Design 2. Preconstruction 3. Construction

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		Arbutus menziesii—Madrone: Single stem or multiple stems touching each other 4.5 feet above the ground >48 inches, or clumps visibly connected above ground with a basal area greater than 20 square feet measured 4.5 feet above average ground level. *Chrysolepis chrysophylla*—Golden chinquapin: >20 inches *Cupressus abramsiana*—Santa Cruz cypress: All individuals *Fraxinus latifolia*—Oregon ash: >12 inches *Lithocarpus densiflorus*—Tan oak: >48 inches *Pseudotsuga menziesii*—Douglas-fir: >60 inches east of Skyline Boulevard and north of Highway 92 *Quercus agrifolia*—Coast live oak: >48 inches *Quercus chrysolepis*—Canyon live oak: >40 inches *Quercus garryana*—Oregon white oak: All trees *Quercus kelloggii*—Black oak: >32 inches *Quercus wislizenii*—Interior live oak: >40 inches *Quercus lobata*—Valley oak: >48 inches Quercus douglasii—Blue oak: >30 inches *Umbellularia californica*—California bay or laurel: Single stem or multiple stems touching each other 4.5 feet above the ground of more than 48 inches in diameter at breast height, or clumps visibly connected above ground with a basal area of 20 square feet measured 4.5 feet above average ground level *Torreya californica*—California nutmeg: >30 inches *Sequoia sempervirens*—Redwood: >84 inches west of Skyline Boulevard or >72 inches east of Skyline Boulevard.				
		• Removal of significant and heritage trees or work within the dripline of significant and heritage trees will be avoided to the extent feasible during construction. • A qualified arborist or a qualified biologist will identify the location of exclusion fencing to be installed around trees to be retained. • Prior to the start of construction, SFPUC or its contractors will install exclusion fencing at the limits of construction, outside the dripline of all trees that are to be retained that are within 50 feet of any grading, road improvements, staging areas, or other construction activity (identified in the field via flagging by a qualified arborist or biologist). Also prior to construction, SFPUC will verify that the temporary construction fencing is installed and approved by a qualified				

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		arborist or biologist. Any encroachment within these areas must first be approved by a qualified arborist or biologist and SFPUC. Temporary fencing will be continuously maintained by the contractor until all construction activities near the trees are completed. No construction activities will occur within the fenced area.				
		• For native trees on slopes, exclusion fencing will consist of a silt fence that will be installed at the upslope base of the tree to prevent soil from drifting down over the root zone (defined as the extent of the tree dripline) if work is to be performed upslope of any such trees. • Any necessary tree pruning will be completed either by a certified arborist or by the contractor under the supervision of either an International Society of Arboriculture qualified arborist, American Society of Consulting Arborists consulting arborist, or a qualified horticulturist. All tree pruning work will adhere to the pruning guidelines adopted by the California Department of Forestry and Fire Protection.				
		Mitigation Measure BIO-7: Replace significant trees and heritage trees that are removed during construction If specific trees to be removed meet the specifications of significant or heritage trees as defined in **Mitigation Measure BIO-6**, SFPUC will replace those trees as follows. • For each significant tree removed, affected areas will be replanted with a minimum of four, Treepot 4 containers (4" square by 14" long). Native trees removed will be replaced with the same species, and nonnative trees removed will be replaced with native tree species determined suitable for the site by a qualified arborist, horticulturist, landscape architect, or biologist. • For each heritage tree removed, affected areas will be replanted with three 15-gallon-sized trees of the same species. • Trees will be replaced within the first year after completion of construction or as soon as possible in an area where construction is completed during a favorable time period as determined by a qualified arborist, horticulturist, landscape architect, or biologist. • Selection of replacement sites and installation of replacement plantings will be supervised by a qualified arborist, horticulturist, landscape architect, landscape contractor, or biologist. Irrigation of trees during the initial establishment period will be provided as deemed necessary by a qualified arborist, horticulturist, landscape architect, landscape contractor, or biologist. • Trees will be planted in close proximity to removal sites, in locations suitable for the replacement species. If the trees cannot be located on the HTWTP site, the specialist will work with the SFPUC to determine an appropriate off-site location. • A qualified arborist, horticulturist, landscape architect, landscape contractor, or biologist will monitor newly planted trees at least twice a year for 5 years. Each year, any trees that do not survive will be replaced. • Any tree planted as remediation for failed plantings will be planted as stipulated here for original plantings, and will be monitored for a period of 5 years following installation.	1. SFPUC EMB 2. CM Team (qualified arborist, horticulturist, landscape architect, or biologist. 3. SFPUC NRLMD	1. SFPUC BEM 2. SFPUC BEM 3. SFPUC NRLMD	1. Ensure that tree replacement requirements, including irrigation as needed, are included in the contract documents. 2. Monitor to ensure that the contractor implements measures in contract documents for tree replacement and irrigation. Report noncompliance, and ensure corrective action. 3. Perform and document long-term monitoring of tree replacement for at least 5 years to ensure compliance with success criteria.	1. Design 2. Construction 3. Post Construction (Monitoring)
GEOLOGY AND SOILS						
GEO-2	Loss of topsoil and	Implement Mitigation Measure HYD-1	--	--	--	--

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	accelerated erosion during construction (All Project Components: PSM)					
GEO-8	Potential damage to facilities from expansive or corrosive soils (All Project Components: PSM)	**Mitigation Measure GEO-1: Conduct a site-specific geotechnical investigation to characterize the extent of expansive and corrosive soils prior to construction** SFPUC will retain qualified (state-licensed) professionals to conduct a site-specific geotechnical investigation to characterize the extent of expansive and corrosive soils onsite. This investigation will be consistent with all applicable standards of professional engineering geologic/geotechnical practice. The purpose of the investigation will be to provide a geologic basis for the development of appropriate project design. As necessary, it will provide design recommendations to account for potential expansive and corrosive conditions identified at project component sites, and the SFPUC will implement the design recommendations.	1. SFPUC EMB	1. SFPUC EMB	1. Conduct site-specific geotechnical investigation and ensure incorporation of design recommendations into the final project design.	1. Design
HYDROLOGY AND WATER QUALITY						
HYD-1	Degradation of water bodies from erosion and sedimentation during construction (All Project Components: PSM)	**Mitigation Measure HYD-1: Implement erosion and sedimentation controls during construction** Consistent with the requirements of the SWRCB General Permit for Stormwater Discharges Associated with Construction Activity, SFPUC and their contractors will ensure construction activities are undertaken in accordance with a project-specific SWPPP. The San Francisco Bay RWQCB, the primary agency responsible for protecting water quality in the study area, is responsible for reviewing and ensuring compliance with the SWPPP. This review is based on the general permit issued by SWRCB. The recommended BMPs, subject to the review and approval of the RWQCB, include the following measures. However, the measures themselves may be altered, supplemented, or deleted during the RWQCB's review process, since the RWQCB has final authority over the terms of the SWPPP. **Scheduling** • Schedule construction activities to minimize ground disturbance during the rainy season. • Sequence construction activities to minimize the amount of time that soils remain disturbed. • Stabilize all disturbed soils as soon as possible following the completion of ground disturbing work in any area of the project site. • Provide plans to stabilize soil with vegetation or physical means in the event rainfall is expected. • ~~Install erosion and sediment control BMPs prior to the start of any ground disturbing activities.~~ **Erosion and Sedimentation** • Preserve existing vegetation at areas where no construction activity is planned or where construction activity will occur at a later date. • Stabilize and revegetate disturbed areas as soon as possible after construction with planting, seeding, and/or mulch (e.g., straw or hay, erosion control blankets, hydromulch, or other similar material) except in actively cultivated areas. • Install silt fences, coir rolls and other suitable measures around the perimeter of the project	1. SFPUC EMB 2. CM Team 3. CM Team	1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM	1. Ensure that the contract documents require that the contractor design, install, and maintain stormwater controls, including preparation of SWPPP. 2. Ensure SWPPP is submitted to RWQCB for review and implement recommendations. 3. Monitor to ensure that the contractor implements measures in contract documents and SWPPP. Report noncompliance and ensure corrective action.	1. Design 2. Preconstruction 3. Construction

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		area and staging areas and around riparian buffers, storm drains, temporary stockpiles, spoil areas, stream channels, swales, downslope of all exposed soil areas and other locations determined necessary to prevent off-site sedimentation. • Install temporary slope breakers during the rainy season on slopes greater than 5 percent where the base of the slope is less than 50 feet from a water body, wetland, or road crossing at spacing intervals. • Use filter fabric or other appropriate measures to prevent sediment from entering storm drain inlets and cover on-site stockpiles of spoils and debris prior to all storm events. • Treat stormwater and water produced by construction site dewatering using sedimentation basins, sediment traps, baker tanks or other measures to ensure that discharges to receiving waters meet applicable water quality objectives. **Groundwater/Dewatering** • Prepare a dewatering plan prior to excavation specifying methods of water collection, transport, treatment, and discharge of all water produced by construction site dewatering. • Impound water produced by dewatering in sediment retention basins or other holding facilities or utilize other functionally equivalent approaches to settle the solids and provide treatment as necessary prior to discharge to receiving waters to meet the water quality objectives of the San Francisco Bay Basin Plan. • Control discharges of water produced by dewatering to prevent erosion. • Locate sedimentation basins and other retention and treatment facilities away from waterways to prevent silt-bearing water from reaching streams. **Tracking Controls** • Grade and stabilize construction site entrances and exits to prevent runoff from the site, and to prevent erosion. • Take protective measures to prevent the loss of materials into El Zanjón Creek. • Install a tire washing facility at the site access to allow for tire washing when exiting the site. • Remove any soil or sediment tracked off paved roads during construction by street sweeping. **Non-stormwater Control** • Place drip pans under construction vehicles and all parked equipment. • Check construction equipment for leaks regularly. • Wash construction equipment in a designated enclosed area regularly. • Contain vehicle and equipment wash water for percolation or evaporative drying away from storm drain inlets and to prevent runoff into El Zanjón Creek. • Refuel vehicles and equipment away from El Zanjón Creek and other drainages to prevent				

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		run-on and runoff, and to contain spills. • Contain fueling areas to prevent run-on and runoff, and to contain spills. • Cover all storm drain inlets when paving or applying seals or similar materials to prevent the off-site discharge of these materials. **Waste Management and Hazardous Materials Pollution Control** • Remove trash and construction debris from the project area daily. • Locate sanitary facilities a minimum of 100 feet from El Zanjón Creek. • Maintain sanitary facilities regularly. • Store all hazardous materials in an area protected from rainfall and stormwater run-on and prevent the off-site discharge of leaks or spills. • Minimize the potential for contamination of El Zanjón Creek and other drainages by maintaining spill containment and clean up equipment on site, and by properly labeling and disposing of hazardous wastes. • Locate waste collection areas close to construction entrances and away from roadways, storm drains, El Zanjón Creek, and other waters. • Inspect dumpsters and other waste and debris containers regularly for leaks and remove and properly dispose of any hazardous materials and liquid wastes placed in these containers. • Train construction personnel in proper material delivery, handling, storage, cleanup, and disposal procedures. **Best Management Practice Inspection, Maintenance, and Repair** • Inspect all BMPs on a regular basis to confirm proper installation and function. • Inspect all stormwater BMPs daily during storms. • Inspect sediment basins, sediment traps, and other detention and treatment facilities regularly throughout the construction period. • Provide sufficient devices and materials (e.g. silt fence, coir rolls, erosion blankets) throughout project construction to enable immediate repair or replacement of failed BMPs.				
		• Inspect all seeded areas regularly for failures, and remediate or repair immediately. **Monitoring and Reporting** • Provide the required documentation for SWPPP inspections, maintenance and repair requirements. • Maintain written records of inspections, spills, BMP-related maintenance activities, corrective actions, and visual observations of off-site discharge of sediment or other pollutants.				

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		• Monitor water quality to assess the effectiveness of control measures, if needed. **Post-Construction Best Management Practices (required when projects add or replace more than 10,000 square feet of impervious surfaces)** (ERRG, 2003) • ~~Revegetate all temporarily disturbed areas as required after construction activities are~~ completed. • Remove any remaining construction debris and trash from the project area upon project completion. • Phase the removal of temporary BMPs as necessary to ensure stabilization of the site. • Maintain post-construction site conditions to avoid any unintended drainage channels, erosion, or areas of sedimentation. • Correct post-construction site conditions as necessary to comply with the SWPPP and any other pertinent RWQCB requirements.				
		Implement Mitigation Measure HAZ-2	--	--	--	--
HYD-2	Degradation of water bodies from dewatering discharges during construction (Treated Water Reservoir: PSM)	**Mitigation Measure HYD-2: Prepare and implement dewatering plan and comply with NPDES requirements prior to and during construction** To address potential impacts on receiving water quality during the construction period related to dewatering effluent discharges, SFPUC and its contractor will: 1) prepare and implement a site-specific dewatering plan, and 2) fully comply with NPDES requirements. The type of NPDES permit (e.g., Waste Discharge Requirements, 401 Water Quality Certification, or General Permit) will be determined by the RWQCB. The dewatering plan will specify how the water will be collected, contained, treated, monitored, and discharged to the vicinity storm drainage system and may include, but would not be limited to, the following: • Identification of methods for collecting and handling water onsite for treatment prior to discharge, including locations and capacity of settling basins, treatment ponds, filter bags, and/or holding tanks, or prior to off-haul in baker tanks; • Identification of methods for treating water onsite prior to discharge, such as filtration, coagulation, sedimentation settlement areas, oil skimmers, pH adjustment, and other BMPs; • Establishment of procedures and methods for maintaining and monitoring dewatering operations to ensure that no breach in the process occurs that could result in exceedance of applicable water quality objectives; and • Identification of discharge locations and include details regarding how the discharge will be conducted to minimize erosion and scour. However, the final dewatering plan may be altered, supplemented, or deleted during the RWQCB review because the RWQCB is the agency with jurisdiction and permit authority over the NPDES. SFPUC and its contractor will request a determination from the RWQCB as to the type of permit under which the project dewatering effluent discharges will be regulated. Based on that	1. SFPUC EMB 2. CM Team 3. CM Team	1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM	1. Ensure that measures required for dewatering discharge requirements are incorporated in contract documents including requirement to prepare dewatering plan. 2. Ensure that the contractor prepares a dewatering plan in accordance with contract documents and regulatory agency requirements. 3. Monitor to ensure that the contractor implements measures in contract documents and dewatering plan, report noncompliance, and ensure corrective action.	1. Design 2. Preconstruction and Construction 3. Construction

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		determination, the discharger will prepare and submit all required and relevant project information so that the RWQCB can issue appropriate guidelines and requirements (e.g., numerical effluent limitations, monitoring and reporting requirements). At a minimum, the project discharges to surface waters will not exceed water quality objective for receiving waters included in the current San Francisco Bay Region Basin Plan, including (but not limited to) the criteria described below. • pH will not be depressed below 6.5 nor raised above 8.5. • Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases from normal background light penetration or turbidity relatable to waste discharge shall not be greater than 10 percent in areas where natural turbidity is greater than 50 nephelometric turbidity units (NTUs). • Temperature will not be increased by more than 5°F (2.8°C) above natural receiving water temperature. • Waters will be free of coloration that causes nuisance or adversely affects beneficial uses. • Waters will not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses. • Waters will not contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses. • All waters will be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. SFPUC and its contractor will comply with all monitoring and reporting requirements established by the RWQCB.				
HYD-4	Water quality impairment and/or downstream flooding from increases in impervious surfaces (All Project Components: PSM)	**Mitigation Measure HYD-3: Implement permanent stormwater pollution prevention BMPs for the HTWTP** SFPUC or its contractor will design and incorporate stormwater pollution prevention BMPs and hydromodification measures into the HTWTP. The BMPs and measures will be sized and designed in accordance with SMCWPPP guidelines to reduce potential impacts on surface water quality. Passive, low-maintenance BMPs (e.g., bioswales, stormwater planters, infiltration areas) are preferred in all areas. These BMPs will be maintained for the life of the proposed project (San Mateo County, 2007). The specific treatment BMPs and hydromodification measures to be utilized will depend on the circumstances and the feasibility and effectiveness of each approach as determined by the San Francisco Bay RWQCB issuing the NPDES permit.	1. SFPUC EMB	1. SFPUC BEM	1. Verify incorporation of BMPs into project design per mitigation measure and permit requirements.	1. Design
HAZARDS AND HAZARDOUS MATERIALS						
HAZ-2	Emission or use of hazardous materials or substances within 0.25 mile of a school during construction (All Project Components: PSM)	Implement Mitigation Measure HYD-3	--	--	--	--

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HAZ-5	Potential exposure to hazardous materials in soil encountered during construction (All Project Components: PSM)	**Mitigation Measure HAZ-1: Perform site investigation for lead-affected soils prior to construction** Prior to project construction, SFPUC will perform an environmental investigation to determine if lead from lead-based paint has contaminated exposed shallow soils that would be disturbed during project construction. Representative shallow soil samples will be collected within 5 feet of a painted structure associated with the equestrian facilities or HTWTP structures constructed prior to 1978 in those areas that are proposed to be disturbed during project construction. The soil samples will be collected from ground surface to 1.5 feet below the surface and will be analyzed for total lead. Depending on the total lead analytical results for soils, additional soluble lead analysis may be required to properly classify soils for waste disposal. Analytical results will be compared to hazardous waste criteria, soil reuse criteria approved by the RWQCB, and health and safety thresholds for construction workers. SFPUC will verify that the findings of the investigation are used during development of the project Hazardous Material Handling and Disposal Plan to determine if special soil management and disposal procedures and/or additional construction worker health and safety procedures implemented during project construction may be required, as required in **Mitigation Measure HAZ-2**.	1 SFPUC EMB 2. CM Team 3. CM Team	1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM	1. Ensure that preconstruction soil sampling is included in contract documents. 2. Ensure soil sampling is conducted in accordance with contract documents. 3. Monitor to ensure that the contractor conducts soil sampling, report noncompliance, and ensure corrective action. Consult RWQCB as required.	1. Design 2. Preconstruction and Construction 3. Construction
		Mitigation Measure HAZ-2: Prepare and implement project Hazardous Material Handling and Disposal Plan prior to and during construction SFPUC will ensure that construction is conducted under an HMHDP that includes all necessary procedures to ensure that excavated soils are stored, managed, and disposed of in a manner protective of human health and in accordance with applicable laws and regulations. SFPUC will ensure that the HMHDP includes available data from any sampling conducted at the project construction areas, including the environmental investigation summarized in **Mitigation Measure HAZ-1**. SFPUC will provide the HMHDP to, and ensure that it is implemented by, construction contractors for the proposed project. SFPUC will ensure that the HMHDP includes the following information: • **Excavated Spoils Management.** The HMHDP will include measures for the testing and management of soils, suspected to contain lead contaminants, and soils and rocks known or suspected to contain naturally occurring asbestos (NOA). SFPUC will ensure that the HMHDP will: (1) provide procedures for evaluating, handling, stockpiling, storing, testing, and disposing of excavated material during project excavation activities; (2) describe required worker health and safety provisions for all workers potentially exposed to lead and asbestos in accordance with state and federal worker safety regulations; and (3) designate personnel responsible for implementation of the HMHDP. • **Excavated Spoils Analysis.** The HMHDP will require that all excavated materials suspected as being hazardous are inspected prior to initial stockpiling, and that spoils that are visibly stained, have a noticeable odor, and/or are known or suspected to contain lead or NOA are stockpiled separately, to minimize the amount of material that may require special handling. Representative samples of excavated material will be collected by a qualified professional and submitted to a California-certified laboratory for analysis of contaminants of concern. The analytical results will be used to classify the spoils as hazardous or nonhazardous waste according to federal and state standards. Spoils classified as either a federal or state hazardous waste will be transported off site for disposal at a permitted facility. Spoils classified as a non-hazardous waste can be reused at the project area, subject to RWQCB concurrence. Concurrence is needed because non-hazardous waste is not necessarily clean. For example, soil can be non-hazardous with 900 ppm total lead, but the concentration exceeds the	1. SFPUC EMB 2. CM Team 3. CM Team	1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM	1. Ensure that requirement for contractor to prepare and submit a hazardous material handling and disposal plan is included in contract documents. 2. Ensure that contractor prepares and submits a hazardous material handling and disposal plan and verify that it complies with requirements. 3. Monitor to ensure that the contractor implements measures in the plan and contract documents, report noncompliance, and ensure corrective action.	1. Design 2. Preconstruction 3. Construction

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		RWQCB soil reuse criterion of 750 ppm for commercial and industrial uses.
		
		• **Construction Worker Health and Safety.** The SFPUC will ensure that its contractor has a site-specific Health and Safety Plan (HASP) prepared for this project. The SFPUC will also ensure that a knowledgeable third party verifies that the HASP is complete and meets all the required elements. The HASP will include measures to protect construction workers and the general public by including monitoring, engineering controls, administrative controls, and security measures to prevent unauthorized entry to the construction area. If prescribed exposure levels are exceeded, personal protective equipment will be required for workers in accordance with state and federal regulations. SFPUC will verify that the HASP is incorporated into the contractor's worker health and safety programs. The HASP will include the following elements:
		
		  ◦ A statement of the possibility of encountering unknown contamination or subsurface hazards, such as previously unreported USTs.
		
		  ◦ Fire prevention and emergency response procedures, including designation of personnel responsible for emergency response and implementation of other measures of the HMHDP.				

HAZ-6	Exposure to naturally occurring asbestos during construction (Treatment Process and Chemical Storage Facilities: PSM)	Implement Mitigation Measure HAZ-2	--	--	--	--
HAZ-8	Potential exposure to hazardous building materials from demolition during construction (All Project Components: PSM)	**Mitigation Measure HAZ-3: Perform hazardous building materials survey prior to demolition** A hazardous building materials survey will be performed by a qualified environmental professional and submitted to SFPUC prior to demolition of the equestrian facilities, the east and west chemical buildings, and the caustic soda tank. The hazardous materials surveys for the equestrian facilities and the caustic soda tanks will include inspections of lead-based paint only. The hazardous materials surveys for the east and west chemical buildings will include inspections of ACMs, lead-based paint, electrical equipment containing PCBs, fluorescent tubes containing mercury vapors, and fluorescent light ballasts containing DEHP. If ACMs are determined to be present in the east and west chemical buildings, the materials will be abated by a certified asbestos abatement contractor in accordance with BAAQMD regulations and notification requirements. If lead-based paint is present, protective measures and air monitoring will be implemented by qualified workers during activities that generate potential airborne exposures to lead in accordance with CAL/OSHA regulations and notification requirements (see Section 5.13.2, *Regulatory Framework*, above). Loose or peeling lead-based paint will be removed by a qualified worker and disposed of in accordance with existing hazardous waste regulations. If lead, asbestos, or other hazardous building materials are present, then applicable federal and state construction worker health and safety regulations will be implemented during construction activities.	1. SFPUC EMB 2. CM Team (registered environmental assessor or registered engineer) 3. CM Team (registered environmental assessor or registered engineer) 4. CM Team	1. SFPUC BEM 2. SFPUC BEM 3. SFPUC BEM 4. SFPUC BEM	1. Ensure that contract documents include requirements for hazardous building materials survey. 2. Obtain and review resume or other documentation of registered environmental assessor or engineer. 3. Conduct hazardous building materials survey. 4. Monitor to ensure that the contractor implements measures in contract documents, report noncompliance, and ensure corrective action.	1. Design 2. Preconstruction 3. Preconstruction and Construction 4. Preconstruction and Construction
CUMULATIVE						

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CUMUL-2	Cumulative impacts on scenic views and visual character (PSM)	Implement Mitigation Measure AES-1	--	--	--	--
CUMUL-3	Cumulative increase in impacts on archaeological, paleontological, and historic architectural resources (PSM)	Implement Mitigation Measures CR-1, CR-2, CR-3, CR-4, CR-5, and CR-6				
CUMUL-4	Cumulative traffic increases on local and regional roads (SU)	**Mitigation Measure TRA-2: Employ a SFPUC WSIP projects construction coordinator** Due to the potential for overlapping project activities and the operation of construction vehicles to affect travel along local roadways, the SFPUC will identify and employ a qualified construction coordinator responsible for coordinating the project-specific traffic control plan developed as part of **Mitigation Measure TRA-1** (Prepare and implement a traffic control plan for HTWTP prior to and during project construction), and public outreach (e.g., website, radio, and newspaper updates) to inform the public of construction activities, detour routes, and alternate routes. The SFPUC construction coordinator will also consider the impacts of any traffic generated by SFPUC maintenance activities and other SFPUC projects (including, but not limited to, Crystal Springs/San Andreas Transmission Upgrade project). The SFPUC construction coordinator will also coordinate with the California Department of Transportation (Caltrans), other county agencies, and local jurisdictions responsible for reviewing and/or approving the construction of other identified private and public development projects (including, but not limited to Millbrae Estates, 599 Cedar Avenue, Skycrest Center, Glenview Terrace), to minimize traffic impacts on local access roads, particularly local streets where sensitive receptors (e.g., schools, residences, or hospitals) are located. Throughout the construction schedule for the SFPUC projects in the WSIP Peninsula Region, the SFPUC construction coordinator shall work with local and regional agencies to minimize local and regional traffic impacts and shall incorporate these measures into the SFPUC project-specific traffic control plans.	1. SFPUC EMB 2. CM Team (Traffic Construction Coordinator) 3. SFPUC Communications 4. CM Team	1. SFPUC BEM 2. CM Team 3. CM Team 4. SFPUC BEM	1. Ensure that contract documents include requirement for contractor to coordinate with SFPUC traffic construction coordinator. 2. Coordinate with construction contractor, agencies, and SFPUC regarding traffic measures. 3. Ensure that public is informed of construction activities. 4. Monitor to ensure that the contractor implements measures in contract documents, report noncompliance, and ensure corrective action.	1. Design 2. Preconstruction and construction 3. Preconstruction and Construction 4. Preconstruction and Construction
		Implement Mitigation Measure TRA-1				
CUMUL-5	Cumulative increases in noise (SU)	Implement Mitigation Measures NOI-1, NOI-2, NOI-3, NOI-4 and NOI-5.	--	--	--	--
CUMUL-6	Cumulative increases in emissions in the region (SU)	Implement Mitigation Measures AIR-1 and AIR-2	--	--	--	--
CUMUL-8	Cumulative impacts related to potential disruptions of utility service and potential non-compliance with local solid waste regulations (PSM)	Implement Mitigation Measures UTL-1, UTL-2, and UTL-3	--	--	--	--

MITIGATION MONITORING AND REPORTING PROGRAM						
Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing & Approval Party		
CUMUL-9	Cumulative loss of sensitive biological resources (PSM)	**Mitigation Measure BIO-8: Coordinate construction staging and access** When construction schedules for SFPUC projects affecting the same areas as the HTWTP project overlap, the SFPUC shall coordinate construction contractor(s) to the extent practicable to minimize surface disturbance to biological resources and water quality associated with access roads, lay down areas, and staging areas.	1. SFPUC EMB 2. CM Team	1. SFPUC BEM 2. SFPUC BEM	1. Ensure that contract documents identify staging, access, and laydown areas. 2. Coordinate construction staging and access with construction contractor(s) when multiple projects near the HTWTP project overlap.	1. Design 2. Construction
		Implement Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, BIO-6, BIO-7, HYD-1, HYD-2, and HYD-3	--	--	--	--
CUMUL-10	Cumulative exposure of people or structures to geologic and seismic hazards (PSM)	Implement Mitigation Measures HYD-1 and GEO-1	--	--	---	--
CUMUL-11	Cumulative impacts related to the degradation of water quality, alteration of drainage patterns, increased surface runoff, and flooding hazards (PSM)	Implement Mitigation Measures HYD-1, HYD-2, and HYD-3	--	--	---	--
CUMUL-12	Cumulative effects related to hazardous conditions and exposure to or release of hazardous materials (PSM)	Implement Mitigation Measures HAZ-1, HAZ-2, and HAZ-3	--	--	--	--

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BAAAQMD = Bay Area Air Quality Management District
BEM = (SFPUC) Bureau of Environmental Management
CEQA = California Environmental Quality Act
CDFG = California Department of Fish and Game
CM Team = (SFPUC) Construction Management Bureau and Construction Management
EMB = (SFPUC) Engineering Management Bureau
ERO = (SF Planning Department) Environmental Review Officer
MEA = San Francisco Planning Department, Major Environmental Analysis Division
MLD = Most Likely Descendant
NACH = Native American Heritage Commission
PSM = Potentially Significant, Mitigable
SU = Significant and Unavoidable
NRLMD = (SFPUC) Natural Resources and Lands Management Division
RWQCB = Regional Water Quality Control Board
SFPUC = San Francisco Public Utilities Commission
SU = Significant and unavoidable impact
SUM = Significant and unavoidable contribution with mitigation
USFWS = U.S. Fish and Wildlife Service