

FINDINGS OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS

DEPARTMENT OF WATER RESOURCES SOUTH BAY AQUEDUCT IMPROVEMENT AND ENLARGEMENT PROJECT

I. INTRODUCTION

The Draft Environmental Impact Report (EIR) and Final EIR address the potential environmental effects of the implementation of the South Bay Aqueduct (SBA) Improvement and Enlargement Project. The SBA Improvement and Enlargement Project is proposed by Department of Water Resources (DWR) to address water supply and capacity issues in the Zone 7 service area. The Proposed Project would make improvements to bring the existing capacity of the water conveyance system up to its design capacity (300 cubic feet per second [cfs]). The expansion portion of the project would add 130 cfs of conveyance capacity pursuant to the request of Zone 7 Water Agency (Zone 7) to meet its future conveyance capacity needs, thereby providing a total conveyance capacity of 430 cfs. In addition, the proposed facilities would allow DWR to reduce State Water Project (SWP) peak power consumption by providing for variation in pumping schedule. The facilities would be located in eastern Alameda County primarily in unincorporated areas. The findings are made in accordance with CEQA, including without limitation, CEQA Guidelines §15091 and §15092. The following components are included in these Findings in the following sections:

- I. Environmental Review Process for the Project
- II. Purpose of the Findings
- III. Legal Effect of the Findings
- IV. Administrative Record

Exhibits:

- A. Project Description
- B. Significant Adverse Impacts
- C. Project Alternatives
- D. Mitigation Monitoring and Reporting Program
- E. Statement of Overriding Considerations

II. ENVIRONMENTAL REVIEW PROCESS

In accordance with CEQA §15063 and §15082, the DWR prepared and circulated a Notice of Preparation (NOP) of an EIR to local, state, and federal agencies on September 24, 2003. No Initial Study was prepared because DWR decided in advance that a full EIR would be required

for this project. The comments received in response to the NOP were included in Appendix B of the Draft EIR.

The Draft EIR on the proposed SBA Improvement and Enlargement Project (SCH # 2003092084), Notice of Completion, and Notice of Availability were submitted to the State Clearinghouse and released for public and agency review on September 28, 2004. Per CEQA Section 15087(c)(6) the proposed facilities are not located on a site identified under Section 65962.5 of the California Government Code, although listed sites are located within the vicinity of the project corridor. The Notice of Availability briefly described the Project Sponsors, Project purpose and components, the location where the copies of the Draft EIR could be reviewed, the contact at DWR for submission of written comments and/or questions, and the date and time of the public meeting to take verbal comments on the Draft EIR.

The Draft EIR was circulated for the 45-day public review from September 28 through November 12, 2004. During this time, a Public Hearing was held to provide interested persons with an opportunity to comment verbally or in writing on the Draft EIR and the project. The Public Hearing was held at the Livermore Public Library on October 26, 2004.

III. PURPOSE OF FINDINGS

Section 15091 of the CEQA *Guidelines* requires that, for each significant environmental effect identified in the EIR for a proposed project, the approving agency must issue a written finding reaching one or more of three allowable conclusions:

1. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the findings. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
3. Specific economic, legal, social, technological, or other considerations, make infeasible the mitigation measure or project alternative identified in the EIR.

These findings accomplish the following: a) they address the significant environmental effects identified in the EIR for the approved Project; b) they incorporate all mitigations measures associated with these significant impacts identified in either the Draft EIR or the Responses to Comments Document/Final EIR, and; c) they indicate whether a significant effect is avoided or reduced by the adopted mitigation measures to a less-than-significant level, or remains significant and unavoidable, either because there are no feasible mitigation measures or because, even with implementation of mitigation measures, a significant impact will occur. For any effects which remain significant and unavoidable, a statement of overriding considerations is presented. The conclusions presented in these Findings are based on the Final EIR (consisting of the Draft EIR and Responses to Comments Document) and other evidence in the record of proceedings.

EXHIBIT A

PROJECT DESCRIPTION

A.1 PROJECT BACKGROUND

In developing the Proposed Project, Zone 7 implemented a series of technical analyses to identify water supply needs within the Zone 7 service area. Based upon updated water demand projections, Zone 7 identified an immediate need for Zone 7 to acquire additional water supplies. Subsequently, Zone 7 and DWR worked together to identify infrastructure needs for delivery of that supply. The following discussion presents an overview of this planning process, and its relationship to the Proposed Project.

ZONE 7 1999 WATER SUPPLY PLANNING PROGRAM-PROGRAM EIR

In 1999, Zone 7 certified the *Water Supply Planning Program – Program EIR*. The 1999 WSPP EIR examined the *Water Supply Planning Study Update* which included a comprehensive review of projected water demands associated with buildout of the General Plans within the Zone 7 service area, and identified a program for water supply acquisition, and treatment and conveyance facility requirements necessary to meet these demands. Based upon updated water demand projections, Zone 7 identified an immediate need for Zone 7 to acquire additional water supplies. Chapter 6 of the 1999 WSPP EIR included program level discussion of necessary treatment and conveyance facilities necessary to meet long-term demands. Improvements of the SBA to increase its conveyance capacity was one of the facility improvements identified for implementation. As such, this SBA Improvements and Enlargement Project EIR is from the program level analysis presented in the 1999 WSPP EIR and incorporates that EIR by reference.

The 1999 WSPP EIR identified the potential indirect, or secondary, growth impacts associated with buildout of the approved General Plans within the Zone 7 service area, as well as the mitigation programs that local jurisdictions have adopted to minimize the effects of growth. As a water agency, Zone 7 does not have the authority to make land use decisions, which lies with the local municipal agencies within its service area. However, acknowledging that the provision of adequate water supply removes one potential obstacle to growth, the Zone 7 Board of Directors adopted a Statement of Overriding Considerations regarding these potential secondary effects of growth within the Zone 7 service area. DWR has previously relied on the 1999 WSPP EIR and adopted a Statement of Overriding Considerations in approving water transfers initially analyzed in the 1999 WSPP EIR.

ZONE 7 WATER CONVEYANCE STUDY

In 2000, following completion of the 1999 WSPP EIR, Zone 7 conducted an extensive analysis of potential conveyance mechanisms for delivery of SWP water into its service area. The objective of this analysis was to identify Zone 7's conveyance capacity needs to meet municipal and agricultural demands at buildout under the approved General Plans within its service area, and to examine potential alternatives to provide this necessary capacity. The Water Conveyance Study prepared by Camp Dresser and McKee identified a conveyance capacity need of an additional 130 cfs to meet peak monthly demands within the Zone 7 service area at buildout under the approved General Plans within its service area.

DWR SOUTH BAY AQUEDUCT IMPROVEMENTS AND ENLARGEMENT FEASIBILITY STUDY

Based upon the two above documents, Zone 7 formally requested that DWR prepare a feasibility report identifying the facilities and costs associated with enlargement of the SBA by 130 cfs. This document was circulated and finalized in May, 2004. The document presents a technical design description and cost estimate for meeting Zone 7's capacity increase request, and provides the basis for the project description examined in the Draft EIR.

A.2 PROJECT UNDER CONSIDERATION

During the public comment period, DWR, as Lead Agency, has continued to assess the economic, institutional, and environmental issues associated with expansion and improvement to the SBA under the Proposed Project. Cumulative construction impacts was the only unmitigable significant environmental impact identified by the Draft EIR. No new significant environmental issues, beyond those already covered in the Draft EIR, were raised during the comment period, and DWR directed that a Final EIR be prepared. Response to comments received during the comment period and staff-initiated revisions to DEIR text did not involve any new significant impacts or provide significant new information that would require recirculation of the DEIR pursuant to CEQA *Guidelines* §15088.5. A Final EIR Responses to Comments Document to the DEIR was made available and circulated to commenters on December 13, 2004.

A.3 PROPOSED SBA IMPROVEMENT AND ENLARGEMENT PROJECT

The DWR proposes improvements to and the expansion of the existing SBA facilities, including modifications and construction of a number of facilities. A general map of SBA Improvement and Enlargement Project is provided in **Figure 1**. Improvement and enlargement of the SBA system would include the following:

- Installation of additional pumps at the South Bay Pumping Plant (SBPP), including expansion of the existing pump building, a new service bay, and new electrical switchyard

- Construction of a third Brushy Creek pipeline and surge tank parallel to existing dual pipeline (Stage 1 and Stage 2) system. DWR refers to this third pipeline as “Stage 3”;
- Construction of a 500 acre-foot (af) reservoir (425 af active storage plus 75 af inactive storage) served by the Stage 3 Brushy Creek Pipeline;
- Raising the height of canal embankments, canal lining and canal overcrossing structures and bridges for the Dyer, Livermore, and Alameda Canals, including Patterson Reservoir;
- Modification of check structures and siphons along the Dyer, Livermore, and Alameda Canals; and
- Construction of new drainage over crossing structures to eliminate drainage into canals.

The proposed modifications and improvements to the SBA system would occur north of Del Valle Reservoir, as shown on **Figure 1**. **Table 1** provides a summary of project components. The Proposed Project is scheduled for completion in 2008. The Project proposed for approval is fully described in Section 2.0 of the Draft EIR, which is incorporated by reference.

INSERT FIGURE 1
Overview Figure

TABLE 1
SBA IMPROVEMENT AND ENLARGEMENT PROJECT
SUMMARY OF PROPOSED IMPROVEMENTS

SBA System Component	Improvements
South Bay Pumping Plant	Enlarge pumping plant through installation of four 45 cfs pump units (proposed Stage 3 ¹); construct new electrical switchyard and relocate equipment; re-contour hillside west for slope stability; excavate shoreline of SBPP inlet to install new intakes; establish drying pond for periodic dredging of inlet.
Stage 3 Brushy Creek Pipeline	Install Discharge and Brushy Creek Pipelines (proposed Stage 3)
Stage 3 Surge Tank	Construct new surge tank adjacent to existing surge tanks. Improvements to Stage 1 and 2 Surge Tanks.
Dyer Reservoir	Construct reservoir to provide 500 af storage (425 af active, 75 af inactive) adjacent and east of Dyer Canal
Canal Embankment and Lining	Raise existing canal embankments between 1.0 to 2.0 feet and raise lining to 3.0 feet, including Patterson Reservoir (1.5 feet); localized lining increases of up to 4.0 feet may be necessary.
Canal Overcrossings	Raise canal over crossing structures, drainage overchutes, bridges, and pipelines; install new overchutes to reduce drainage into canal.
Canal Check Structures and Siphons	Modify check structures to add more cross sectional area; install second siphon barrels at five sites

¹ To distinguish this construction from the earlier two stages of the SBPP and Brushy Creek Pipelines, the proposed facilities are herein referred to as Stage 3.

EXHIBIT B

FINDINGS OF FACT REGARDING SIGNIFICANT IMPACTS

B.1 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

The Final EIR indicates that significant unavoidable impacts attributable to the Proposed Project are limited to short-term cumulative impacts and secondary effects of growth. As described below in the findings for these impacts, there are either no feasible mitigation measures or the feasible mitigation measure(s) would only partially mitigate this significant impact and the residual effect would remain significant. It is hereby determined that this impact is acceptable for the reasons specified in the Statement of Overriding Considerations, presented in Exhibit E.

SECTION 4.0 GROWTH

IMPACT 4-1 SECONDARY EFFECTS OF GROWTH

Impact 4.1: The SBA Improvement and Enlargement Project would support a level of growth that is consistent with the amount planned and approved by the planning agencies within Zone 7's service area. No appreciable growth in population or employment would occur as a direct result of construction or operation of the project facilities. However, the growth accommodated by the project would result in secondary environmental effects. Significant, unavoidable impacts could occur as a result of planned growth in the following areas: traffic and traffic congestion, air pollution, loss of agricultural land and open space, loss of wildlife habitat, alteration of the Valley's visual character, grading and permanent changes in topography, increased traffic noise, increased demand for solid waste disposal capacity, seismic hazards, impacts to wildlife habitat, growth pressures for land conversion, lack of wastewater disposal capacity, cumulative demand for schools and parks, increased flooding potential, increased urban runoff pollutants, and increased energy demand. This impact is considered Significant and Unavoidable.

MITIGATION

No Mitigation Measures are required. Implementation of the Proposed Project would allow the Department of Water Resources (DWR) to provide the level of peak conveyance capacity requested by its water service contractor, Zone 7. The Proposed Project would not result in a direct increase in population or employment, but would indirectly support growth that is consistent with the local General Plans and regional growth management projections within the Zone 7 service area. Therefore, some potentially adverse secondary effects could result from development of planned land uses in the cities and unincorporated county areas within the Zone 7 service area. DWR does not have any authority to make land use decisions within the Zone 7 service area, or to mitigate for the secondary effects of

those land use decisions. The cities of Dublin, Pleasanton and Livermore, and Alameda County have primary land use jurisdiction and responsibility to regulate growth through the land use planning and development approval process.

FINDINGS

Based on the Final EIR and the entire record before DWR, including all the City and County environmental documents referenced in the Final EIR, DWR finds that, with the exception of water supply, measures that lessen the significant secondary environmental effects associated with growth under the existing General Plans within the Zone 7 service area are within the responsibility and jurisdiction of other public agencies and not the agency making the finding. Such changes have been adopted by such other agencies or can and should be adopted by such other agencies. In addition and independent of this fact, specific economic, legal, social, technological, or other considerations justify approval of the Proposed Project, notwithstanding this impact, as more fully stated in the Statement of Overriding Considerations (see Exhibit E).

SECTION 5.0 CUMULATIVE IMPACTS

IMPACT 5-1 CUMULATIVE CONSTRUCTION IMPACTS

Impact 5.1: Concurrent construction of several infrastructure projects within the SBA project corridor, and capital improvement and development projects within the Livermore Valley, could result in cumulative short-term impacts associated with construction activities. These include short-term impacts to water quality, land use, air quality, noise, traffic, hazardous materials, public services and utilities, and visual resources. In some areas, particularly along Dyer Road, these impacts, while individually short term in nature, would be potentially significant due to their aggregate effect; however, construction-related impacts would not result in long-term alteration of the environment. Significant, Cumulative, Unavoidable and Short-Term. Partially reduced with Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will partially mitigate the impact.

Measure 5.1: Zone 7 and DWR shall coordinate construction activities along selected alignments to identify overlapping pipeline routes, project areas, and construction schedules. To the extent feasible, construction activities shall be coordinated to consolidate the occurrence of short-term construction-related impacts.

FINDINGS

Based on the Final EIR and the entire record before DWR, including all the City and County environmental documents referenced in the Final EIR, DWR finds that, the ability to anticipate the timing of projects which if implemented at the same time as the Proposed

Project would result in significant and unavoidable cumulative construction impacts, is not within the responsibility and jurisdiction of DWR. In addition and independent of this fact, specific economic, legal, social, technological, or other considerations justify approval of the Proposed Project, notwithstanding this impact, as more fully stated in the Statement of Overriding Considerations (see Exhibit E).

B.2 SIGNIFICANT AND POTENTIALLY SIGNIFICANT ADVERSE IMPACTS REDUCED TO LESS-THAN-SIGNIFICANT LEVEL BY MITIGATION MEASURES INCORPORATED INTO THE PROJECT

The Final EIR identifies significant impacts which are reduced to a “less-than-significant” level by the inclusion in the Proposed Project approval of the mitigation measures identified in the Final EIR. It is hereby determined that the significant environmental impacts that these mitigations address will be avoided or substantially lessened by their inclusion in the Proposed Project.

SECTION 3.1 GEOLOGY AND SEISMICITY

IMPACT 3.1-1 GROUND SHAKING

Impact 3.1-1: In the event of a major earthquake in the Bay Area Region, proposed facilities could be subject to ground shaking capable of causing localized collapse or damage of engineered fills, structural damage, pipeline rupture, or equipment topple. Damage to project facilities could result in service interruptions. Less than Significant with Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Measure 3.1-1: DWR shall update their Earthquake Preparedness and Response Plan to prescribe actions to identify and remedy potential hazards related to earthquake-related equipment topple, employee injury, fire, and equipment failure for the new facilities. The Plan shall include a detailed post-earthquake inspection procedure and schedule to identify conditions that compromise workers safety or could result in extensive service interruptions. DWR will coordinate development of the Earthquake Preparedness and Response Plan with local regulatory agencies and with the Office of Emergency Services (OES). The plan will include public safety measures identified by OES relating to earthquake preparedness.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

SECTION 3.2 WATER RESOURCES AND WATER QUALITY

IMPACT 3.2-1 EROSION AND SEDIMENTATION

Impact 3.2-1: Construction of proposed facilities could result in increased erosion and subsequent sedimentation, with impacts to water quality and/or storm drain capacity. Additionally, discharge of groundwater, release of fuels, or release of other hazardous materials associated with construction activities could degrade water quality. Less than Significant with Mitigation.

MITIGATION

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. These measures will mitigate the above impact to a less than significant level.

Measure 3.2-1a: For all project construction components, a SWPPP will be developed for construction activities as required by the State Water Resources Control Board for construction of projects exceeding 5 acres. The objectives of the SWPPP are to identify pollutant sources that may affect the quality of stormwater discharge and to implement control practices to reduce pollutants in stormwater discharges. The SWPPP for this project will include implementation of a minimum of the following elements:

- Source identification
- Preparation of a site map
- Description of construction materials, practices, and equipment storage and maintenance
- List of pollutants likely to contact stormwater
- Estimate of the construction site area
- Erosion and sedimentation control practices including: soils stabilization, re-vegetation, and runoff control to limit increases in sediment in stormwater runoff: such as detention basins straw bales, silt fences, drainage swales, and sand bag dikes
- List of provisions to eliminate or reduce discharge of materials to storm waters
- Description of waste management practices

- Maintenance and training practices

Measure 3.2-1b: Dredging Activities. DWR shall acquire appropriate permits for excavation and dredging of Bethany Forebay Inlet Channel, including permits from USACOE, RWQCB, and CDFG, as applicable. DWR shall abide by permit requirements, which may require use of BMPs, such as sediment barriers to isolate work areas from the larger reservoir.

Measure 3.2-1c: Dredge Material Disposal. Dredged materials shall be disposed of in accordance with *Beneficial Reuse of Dredged Materials: Sediment Screening and Testing Guidelines, Draft Staff Report*.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.2-2 DRAINAGE

Impact 3.2-2: Installation of the proposed facilities would have the potential to alter drainage patterns, runoff rates, and flow volumes. Less than Significant with Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Measure 3.2-2a: All proposed facilities shall be designed to include appropriate drainage infrastructure to convey flows generated onsite and from upstream areas. Drainage designs shall be integrated with existing drainage systems, and shall be designed to avoid or minimize effects to downstream areas and infrastructure.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.2-3 GROUNDWATER

Impact 3.2-3: Installation of the proposed facilities would have the potential to alter groundwater flow patterns, with secondary effects to private well operations. Less than Significant with Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Measure 3.2-3: DWR shall monitor groundwater conditions at the Dyer Reservoir site to ensure that substantial decreases in groundwater levels onsite are not observed following installation of the reservoir structure and sub-drain systems.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

SECTION 3.3 BIOLOGICAL RESOURCES

IMPACT 3.3-1 GRASSLAND HABITAT – SENSITIVE SPECIES

Impact 3.3-1: Construction of the Proposed Project would have the potential to affect grassland along the SBA project corridor, including sensitive plant species that may occur. Sensitive plant surveys conducted for all facilities indicate that the Stage 3 Brushy Creek Pipeline would impact 1.0 acres of fragrant fritillary habitat and approximately 400 individual plants. Less than Significant with Mitigation.

MITIGATION

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. These measures will mitigate the above impact to a less than significant level.

Measure 3.3-1a: Soil Salvage and Site Restoration. To ensure the re-establishment of California annual grassland disturbed by pipeline installation, the upper 6-12 inches (minimum of 6 inches and maximum of 12 inches based on geology and depth to bedrock) of soil will be salvaged and then placed back onto trenches as the last material added to restore the original contours as practicable and feasible. All disturbed areas will be reseeded with a grassland palette appropriate for the Altamont Foothills and approved by CDFG.

Measure 3.3-1b: Sensitive Plant Mitigation. DWR shall mitigate for population loss through either seed collection and revegetation, or participation in a mitigation bank, as described below:

- **Seed Collection.** Prior to the start of construction, a qualified biologist, working in association with an expert in native plant horticulture, shall harvest and transplant mature fragrant fritillary bulbs to a suitable mitigation site. The mitigation site shall

be protected in perpetuity, through a conservation easement or other similar instrument.

- Mitigation Bank. Land that supports a known population of fragrant fritillary outside the SBA project corridor shall be purchased at a ratio of 1.5:1, or as established in regulatory permits, and protected in perpetuity.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.3-2 JURISDICTIONAL IMPACTS

Impact 3.3-2: Construction of the Proposed Project could result in impacts to potentially jurisdictional wetlands or waters of the U.S. under the jurisdiction of the USACOE and waters of the state under the jurisdiction of the SWRCB or Regional Water Quality Control Board (RWQCB). The Proposed Project could also result in impacts to the streambed and banks under jurisdiction of CDFG. Potential impacts include sedimentation of channels downstream of the construction areas during trenching and excavating activities, and loss of riparian and instream wetland vegetation. Less than Significant with Mitigation.

MITIGATION

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. These measures will mitigate the above impact to a less than significant level.

Measure 3.3-2a: Implement Standard BMPs to Maintain Water Quality and Control Erosion and Sedimentation. Standard measures to maintain water quality and control erosion and sedimentation shall be implemented in Brushy Creek and in wetland areas along the canal alignments, as required by compliance with the General National Pollution Discharge Elimination System (NPDES) Permit for Construction Activities and established by **Measure 3.2-1a**.

Measure 3.3-2b: Construction within jurisdictional features will require permit approval from the USACOE for fill in wetlands and other waters of the U.S. pursuant to Section 404 of the Clean Water Act. Water quality certification from the RWQCB will also be required pursuant to Section 401 of the CWA. In addition, the CDFG has jurisdiction pursuant to Sections 1601-1603 of the Fish and Game Code, and the pipeline construction in Brushy Creek will require a Streambed Alteration Agreement from CDFG. Terms and conditions of the permits will include measures to protect and maintain water quality, restore work sites, and mitigate for permanent and temporary wetland impacts.

Measure 3.3-2c: To offset the permanent impacts to wetlands and other waters of the U.S., compensatory mitigation will be provided as required by regulatory permits. Mitigation would be provided through one of the following mechanisms:

- Purchase or dedication of land to provide suitable wetland restoration or creation. If restoration is available and feasible, then a ratio of 2:1 would be proposed. If creation is required, a 3:1 ratio will be implemented to off-set losses. Where practical and feasible, on-site mitigation will be implemented.
- A wetland mitigation and monitoring plan will be developed that will outline mitigation and monitoring obligations for temporary and permanent impacts to wetlands and other waters as a result of construction activities. This Plan will include thresholds of success, monitoring and reporting requirements, and site specific plans to compensate for wetland losses resulting from the project. The mitigation and monitoring plan will be submitted to the appropriate regulatory agencies for approval.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.3-3 SAN JOAQUIN KIT FOX

Impact 3.3-3: Construction of the Proposed Project would result in temporary and permanent loss of potential habitat for San Joaquin kit fox. Less than Significant with Mitigation.

MITIGATION

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. These measures will mitigate the above impact to a less than significant level.

Measure 3.3-3a: The following measures are derived from the USFWS *Standardized Recommendations for Protection of the San Joaquin kit fox*. These measures shall be implemented for construction at the SBPP, Brushy Creek Pipeline, and Dyer Reservoir site.

- Preconstruction surveys will be conducted within 200-feet of work areas to identify potential kit fox dens or other refugia in and surrounding work stations. The survey for potential kit fox dens would be performed by a qualified biologist 14-30 days prior to the commencement of construction activities. All identified potential dens would be monitored for evidence of kit fox use by placing tracking material at den entrances and monitoring for at least three consecutive nights. If no activity is detected at these dens, they may be closed (with prior concurrence from the USFWS). Alternatively, fencing may be used to establish construction exclusion zones, with concurrence from USFWS.

- If kit fox occupancy is determined at a given site, closure activities would immediately be halted and the USFWS would be contacted. Depending on the den type, reasonable and prudent measures to avoid effects to kit fox may include seasonal limitations on project construction at the site (i.e., restricting the construction period to avoid spring-summer pupping season), or establishing a construction exclusion zone around the identified site, or resurveying the den following a brief (i.e., 7 days) period to determine species presence or absence.
- During project construction, project-related vehicles would observe a maximum 20-mile-per-hour speed limit on private roads in kit fox habitat to minimize the possibility for inadvertent kit fox mortality. Off-road construction traffic outside the designated construction area would be prohibited in areas that provide kit fox habitat.
- To prevent accidental entrapment of kit fox or other animals during construction, all excavated holes or trenches greater than 2 feet deep would be covered at the end of each work day with suitable materials, or escape routes would be constructed of earthen materials or wooden planks. Before such holes are filled, they shall be thoroughly inspected for trapped animals.
- All food-related trash items such as wrappers, cans, bottles, and food scraps would be disposed of in closed containers and removed from the project site.
- To prevent kit fox harassment, mortality, or destruction of dens, no pets would be allowed with construction personnel on the project site.
- Although not currently proposed, in the event that limited nighttime construction is required, all construction activities will conform to the above measures and will be actively monitored to minimize potential effects to kit fox.

Measure 3.3-3b: To compensate for temporary and permanent losses to San Joaquin kit fox habitat, DWR will provide compensatory mitigation at a ratio of 1.1:1 for temporary and 3:1 for permanent losses. Provision of compensatory mitigation may be provided through one, or a combination of, the following mechanisms:

- Establishment of conservation easement on lands currently owned by DWR adjoining Bethany Reservoir.
- Participation in an approved mitigation bank program;
- Establishment of conservation easement or purchase of private lands to be set aside as managed kit fox habitat.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to

the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.3-4 CALIFORNIA RED-LEGGED FROG AND CALIFORNIA TIGER SALAMANDER

Impact 3.3-4: Construction of the Proposed Project would result in the temporary and permanent loss of potential aquatic and breeding habitat for California red-legged frog and California tiger salamander. Less than Significant with Mitigation.

MITIGATION

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. These measures will mitigate the above impact to a less than significant level.

Measure 3.3-4a: Measures to minimize and avoid California red-legged frog and California tiger salamander habitat. Measures to minimize and avoid “take” of CRLF would be implemented for the project. These measures shall also provide protection for CTS. These measures are derived from the Programmatic Biological Opinion (PBO) for impacts to CRLF. This project will not likely be covered under the PBO. However, the PBO summarizes typical project effects that could occur as a result of the proposed action and provides generic preventive measures that will substantially reduce the risk of incidental “take” of CRLF. Prior to and during construction, the following actions will be performed to minimize adverse effects to CRLF and CTS:

- The name and credentials of a biologist qualified to act as construction monitor will be submitted to USFWS for approval at least 15 days prior to commencement of work.
- A USFWS-approved biologist shall survey the work sites two weeks before the onset of construction activities. If California red-legged frog, tadpoles, or eggs are found, the approved biologist shall contact USFWS to determine if moving any of these life-stages is appropriate. If USFWS approves moving the animals, the approved biologist shall be allowed sufficient time to move frogs from the work sites before work activities begin. If California red-legged frog are not identified, construction may proceed at these sites.
- All work activities within or adjacent to potential CRLF aquatic habitat shall be completed between May 1 and November 1.
- Exclusionary fencing (i.e. silt fences) shall be installed around all construction areas that are within 100 feet of or adjacent to potential California red-legged frog habitat.
- A USFWS–approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the California red-legged frog and its habitat, the importance of the California red-legged frog and its habitat, the general measures that are being implemented to conserve California

red-legged frog as they relate to the project, and the boundaries within which the project may be accomplished.

- A USFWS-approved biologist shall be present at active work sites until such time that the removal of California red-legged frog, instruction of workers, and habitat disturbance have been completed. After this time, the contractor or permittee shall designate a person to monitor on-site compliance with all minimization measures. The USFWS-approved biologist shall ensure that this individual receives training outlined in the PBO.
- During work activities, all trash that may attract predators shall be properly contained, removed from the work site and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.
- Staging areas shall be situated at least 60 feet from any riparian habitat or water body. All fueling and maintenance of vehicles and other equipment shall occur at least 60 feet from any riparian habitat or water body. The USACOE and permittee shall ensure contamination of habitat does not occur during such operations. Prior to the onset of work, the USACOE shall ensure that the permittee has prepared a plan to allow a prompt and effective response to any accidental spills.
- Project sites shall be revegetated with an appropriate assemblage of native upland vegetation, and if necessary, riparian and wetland vegetation, suitable for the area. A plan describing pre-project conditions and restoration and monitoring success criteria will be prepared prior to construction.

Measure 3.3-4b: Consultation with USFWS. Facilities that are located within occupied or suspected CRLF and CTS habitat, shall be subject to formal Section 7 consultation under the Endangered Species Act. Consultation with USFWS would likely establish additional reasonable and prudent measures to avoid CRLF and CTS take and require mitigation for temporary and permanent impacts to CRLF habitat. These measures will be in addition to those minimization measures implemented under **Measure 3.3-4a**.

Measure 3.3-4c: DWR shall provide compensation for the temporary disruption (1.1:1 ratio) and permanent loss of CRLF and CTS habitat (3:1 ratio), or similar ratios approved by CDFG and USFWS through one, or a combination of, the following mechanisms:

- Establishment of conservation easement on lands currently owned by DWR adjoining Bethany Reservoir.
- Participation in an approved mitigation bank program;
- Establishment of conservation easement or purchase of private lands to be set aside as managed CRLF & CTS habitat.
- Enhancement and revegetation along the SBA project corridor. This may include enhancement of Brushy Creek along the construction area (approximately 3,000 linear feet) to provide suitable aquatic breeding habitat for CRLF. Methods of enhancement and restoration may include, but are not limited to: reducing erosion,

installing breeding ponds, excluding cattle, and other measures to increase water quality within the reach.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.3-5 VERNAL POOLS

Impact 3.3-5: Construction of the Proposed Project would result in the temporary and permanent loss of habitat capable of supporting listed vernal pool invertebrates, including Longhorn fairy shrimp and Vernal pool fairy shrimp. Less than Significant with Mitigation.

MITIGATION

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. These measures will mitigate the above impact to a less than significant level.

Measure 3.3-5a: Complete Seasonal Surveys. Surveys shall be completed for 2004 dry season and 2004/05 wet season to complete the USFWS survey protocol. If results are negative, no additional mitigation measures are required.

Measure 3.3-5b: Agency Consultation. If vernal pool invertebrates are found within the SBA project corridor, consultation with USFWS will be required. DWR shall provide compensation for the permanent loss of vernal pool habitat at a 3:1 ratio, or similar ratio approved by CDFG and USFWS through one, or a combination of, the following mechanisms:

- Establishment of conservation easement on lands currently owned by DWR adjoining Bethany Reservoir.
- Participation in an approved mitigation bank program;
- Establishment of conservation easement or purchase of private lands to be set aside as managed vernal pool habitat.
- Enhancement and revegetation along the SBA project corridor

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to

the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.3-6 BURROWING OWL

Impact 3.3-6: Construction of the Proposed Project would result in the temporary and permanent loss of occupied habitat for the burrowing owl. Less than Significant with Mitigation.

MITIGATION

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. These measures will mitigate the above impact to a less than significant level.

Measure 3.3-6a: Preconstruction surveys for burrowing owls shall be conducted by a qualified biologist 14-30 days prior to the start of construction according to current CDFG protocol. Surveys shall cover grassland areas within 250 feet of individual facility construction areas (SBPP, Brushy Creek Pipeline, and Dyer Reservoir). Surveys along canals will be limited to DWR right-of-way, due to the limited nature of construction and availability of access. If owls are detected during surveys, occupied burrows will not be disturbed.

The proposed Dyer Reservoir site is a significant breeding location for burrowing owl. The following measures to avoid, minimize, or mitigate impacts to burrowing owls would be incorporated into the project. If other areas of the SBA project corridor are occupied by burrowing owls, the following measures would apply as well:

- Construction exclusion areas would be established around the occupied burrows in which no disturbance would be allowed to occur. During the non-breeding season (September 1 through January 31), the exclusion zone would extend 160 feet around occupied burrows. During the breeding season (February 1 through August 31), exclusion areas would extend 250 feet around occupied burrows.
- If the above requirements cannot be met, passive relocation of on-site owls may be implemented as an alternative, but only during the non-breeding season and only with CDFG approval. Passive relocation would be accomplished by installing one-way doors on the entrances of burrows located within 160 feet of the project site. The one-way doors would be left in place for 48-hours to ensure the owls have left the burrow. The burrows would then be excavated with a qualified biologist present.
- Burrows within the construction area would be excavated using hand tools, and then refilled to prevent reoccupation. If any burrowing owls are discovered during excavation, excavation would cease and the owl would be allowed to escape. Excavation may be completed when the biological monitor confirms the burrow is empty.
- For each burrow excavated by project construction, two alternative unoccupied natural or artificial burrows would be provided outside the 160-foot buffer zone. The

alternate burrows would be monitored daily for seven days to confirm that the owls have moved and acclimated.

Measure 3.3-6b: To compensate for permanent loss of burrowing owl habitat from the Proposed Project (SBPP – 7.5 acres; Brushy Creek Pipeline – 0.67 acres; Dyer Reservoir – 27 acres), DWR will compensate this loss at a minimum ratio of 3:1 or similar ratio deemed appropriate by CDFG.

Measure 3.3-6c: Temporary losses of burrowing owl habitat will be mitigated by site restoration, and where required, by installation of artificial burrows (see **Measure 3.3-6a**). Given the regional importance of the burrowing owl colony at Dyer Reservoir, artificial burrows will be established at a ratio of 3:1 for all burrows occupied at the time of construction disturbance or as recorded in the 2004 survey, whichever is higher. Artificial burrows will be established through one of the following mechanisms:

- Once construction of Dyer Reservoir is completed, artificial burrows will be established on the spoil site east of the proposed reservoir.
- Installation of a similar number of artificial burrows at the conservation easement established to mitigate for San Joaquin kit fox habitat (see **Measure 3.3-3b**).
- Participation in a USFWS-approved mitigation bank providing offset mitigation credits for loss of burrowing owl habitat.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.3-7 WESTERN POND TURTLE

Impact 3.3-7: Construction of the Proposed Project would result in temporary construction disturbance to pond turtle habitat. Less than Significant with Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Measure 3.3-7a: Prior to the start of construction activities, a qualified biologist shall perform pond turtle surveys within Brushy Creek and in other ponded areas affected by the Proposed Project. Surveys may include a search for nests as well as individual turtles. The qualified biologist will be responsible for the survey and for the relocation of adult turtles. Construction will not proceed until the SBA project corridor can be deemed free of turtles and nests. If nests are observed, a biologist with the appropriate permits from CDFG, may

move the eggs to a suitable facility for incubation, and release hatchlings into the creek system in the following fall.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.3-8 BIRD NESTING HABITAT

Impact 3.3-8: Construction of the Proposed Project would result in disturbance to nesting habitat for breeding raptors and passerine birds. Less than Significant with Mitigation.

MITIGATION

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. These measures will mitigate the above impact to a less than significant level.

Measure 3.3-8a: Protection to nesting and breeding birds and raptors. The following mitigation measures will be implemented to address potential impacts to nesting and breeding birds and raptors in the vicinity of the construction sites:

- To the extent feasible, construction activities shall avoid the nesting season between March 15 and August 15. If construction must occur during this period, all sites shall be surveyed prior to construction by a qualified biologist to verify the presence or absence of nesting birds or raptors. If the survey indicates the potential presence of nesting birds or raptors, the results would be coordinated with CDFG and suitable avoidance measures would be developed and implemented. Construction shall observe the CDFG avoidance guidelines which require a minimum 500-foot buffer zone surrounding active raptor nests and a 250-foot buffer zone surrounding nests of other birds. Buffer zones shall remain until young have fledged.

Measure 3.3-8b: Construction activities within 500 feet of MP 8.60 along Livermore Canal in the vicinity of the known golden eagle nest and tricolored blackbird nesting colony, will be avoided during these species nesting and breeding periods. The nesting period for golden eagle is between February and April. The nesting period for tricolored blackbirds is between April and July. Nest activity will be confirmed by site monitoring prior to construction.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to

the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.3-9 TREE IMPACTS

Impact 3.3-9: Construction of the Proposed Project could result in impacts to heritage or other significant trees within the SBA project corridor. Less than Significant with Mitigation.

MITIGATION

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. These measures will mitigate the above impact to a less than significant level.

Measure 3.3-9a: DWR shall conduct a tree survey along the SBA project corridor and avoid removal or damage to protected trees. If complete avoidance is infeasible, implement **Measures 3.3-8a and 3.3-8b**. This measure applies to those project components that occur within the County of Alameda right-of-way.

Measure 3.3-9b: If tree removal is required, a permit from the County of Alameda Public Works Department shall be obtained, and mitigation developed in coordination with the County. Mitigation may be required and could include replacing disturbed or removed trees or compensating the County for the appraised value of the impacted trees. Trees will be replanted at the same location following construction with appropriate setback from pipeline. Maintenance of the replanted trees until established may be required by the County to ensure survival.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.3-10 COMMON SPECIES

Impact 3.3-10: Construction of the Proposed Project could result in impacts to common plant and animal species. Less than Significant With Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Measure 3.3-10a: For construction at all facilities, one of the following shall be implemented: cover all open trench areas at the end of work days; provide escape ramps; or have the biological monitor check trenches daily.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

SECTION 3.4 LAND USE, PLANNING AND RECREATION

IMPACT 3.4-1 SHORT-TERM LAND USE DISTURBANCES

Impact 3.4-1: Project construction would result in short-term disturbance to some adjacent land uses along the project construction corridor. Less than Significant with Mitigation.

MITIGATION

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. These measures will mitigate the above impact to a less than significant level.

Measure 3.4-1a: DWR shall require its contractor to prepare a Traffic Control Plan specifying measures for maintaining access to residences along the construction route, including Dyer Road (see **Section 3.8, Traffic and Circulation**).

Measure 3.4-1b: DWR shall coordinate access to wind turbine facilities with operators, and shall include provisions to maintain access or provide alternative access to wind turbine facilities during construction (see **Section 3.8, Traffic and Circulation**).

Additional mitigation measures for construction disturbance to residential receptors are identified in **Sections 3.6, Air Quality** and **3.7, Noise**.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.4-2 LONG-TERM LAND USE DISTURBANCES

Impact 3.4-2: Project construction could result in long-term effects to existing and planned land uses in the vicinity of proposed facilities. Less than Significant with Mitigation.

MITIGATION

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. These measures will mitigate the above impact to a less than significant level.

Measure 3.4-2a: DWR shall negotiate with wind turbine operators to provide replacement compensation for the loss of one turbine along the Stage 3 Brushy Creek Pipeline. This negotiation shall occur concurrently with permanent right-of-way acquisition for the pipeline route.

Measure 3.4-2b: DWR shall negotiate with WMI to ensure that easement acquisition does not preclude WMI from meeting its mitigation obligation as identified in C-5512 and subsequent regulatory permits. This may include identification of appropriate lands to offset open space acreage permanently removed from conservation, estimated at 27 acres.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.4-3 RECREATION DISTURBANCES

Impact 3.4-3: Project construction could result in short-term and long-term disturbance of recreational facility uses. Less than Significant with Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Measure 3.4-3a: Implement Measure 3.4-1a.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.4-4 FARMLAND

Impact 3.4-4: Implementation of the Proposed Project could result in the disturbance of land designated by the Department of Conservation FMMP as Farmland of Statewide Importance,

Grazing Land and lands under the Williamson Act contract. Less than Significant with Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Measure 3.4-4: Implement provisions in Article 6 of the Williamson Act (Government Code Sections 51290-51295, as amended by Senate Bill 1534 in 1994) regarding acquisition of contracted land for public use. Specific provisions define procedures that DWR must follow in notifying the Director of the Department of Conservation, conditions under which a public improvement may not be located within an agricultural preserve, and public improvements which are exempt from these conditions.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.4-5 CONSERVATION EASEMENTS

Impact 3.4-5: In the event that a conservation easement is established at Bethany Reservoir for biological resource mitigation, implementation of a conservation easement could have secondary effects to recreational uses associated with limiting potential future recreational uses at Bethany Reservoir within the conservation easement area. Less than Significant with Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Measure 3.4-5a: Establishment of biological resource conservation easements at Bethany Reservoir shall include provisions to allow for passive or guided recreational access, as appropriate within the context of the conservation easement goals. DWR shall coordinate with California Department of Parks and Recreation with respect to establishment of conservation easements at Bethany Reservoir.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

SECTION 3.5 CULTURAL RESOURCES

IMPACT 3.5-1 KNOWN ARCHAEOLOGICAL RESOURCES

Impact 3.5-1: Construction of proposed facilities would have the potential to impact known archaeological resources. Less than Significant with Mitigation.

MITIGATION

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. These measures will mitigate the above impact to a less than significant level.

Measure 3.5-1a: Known prehistoric and historic archaeological sites located within, or just outside of the project APE, should be designated as Environmentally Sensitive Areas. Construction personnel and equipment will be instructed on avoidance of Environmentally Sensitive Areas.

Measure 3.5-1b: All construction personnel shall be trained regarding the recognition of possible buried cultural remains, including prehistoric and historic resources during construction, prior to the initiation of construction or ground-disturbing activities. DWR shall complete training for all construction personnel. Training shall inform all construction personnel of the procedures to be followed upon the discovery of archaeological materials, including Native American burials. The following issues shall be addressed in training or in preparation for construction:

- Any subsurface disturbance shall require the education of construction personnel regarding the potential for inadvertent exposure of buried archaeological deposits.
- DWR shall provide a background briefing for supervisory construction personnel describing the potential for exposing cultural resources, the location of any potential Environmentally Sensitive Areas and anticipated procedures to treat unexpected discoveries.
- Upon discovery of potential buried cultural materials, work in the immediate area of the find shall be halted and a qualified archaeologist notified. Once the find has been identified, the archaeologist will make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are found to be significant according to CEQA.

Measure 3.5-1c: DWR shall develop a Cultural Resources Management Plan that includes procedures for the protection and avoidance of sensitive areas and Archaeological High-Probability Areas; evaluation and treatment of the unexpected discovery of cultural resources including Native American burials; detailed reporting requirements by the Project archaeologist; curation of any cultural materials collected during the Project; and requirements that archaeologists and other discipline specialists meet the Professional Qualifications Standards mandated by the California Office of Historic Preservation. Specific protective measures shall be defined in the Cultural Resources Management Plan

to reduce the potential adverse impacts on any presently undetected cultural resources to a less-than-significant level.

Measure 3.5-1d: The Cultural Resources Management Plan shall define construction procedures for areas near known/recorded cultural sites. Wherever trenches, access roads, equipment, etc., must be placed or accessed within 100 feet of a recorded, reported, or known archaeological site eligible or potentially eligible for the California Register of Historic Resources, the site will be flagged on the ground as an Environmentally Sensitive Area (without disclosure of the exact nature of the environmental sensitivity). Archaeological monitoring of Project construction will be focused in the immediate vicinity of the designated Environmentally Sensitive Areas.

Measure 3.5-1e: Archaeological monitoring shall be conducted by a qualified archaeologist familiar with the types of historic and prehistoric resources that could be encountered along the pipeline corridor. Monitoring shall occur in all locations specified below or at the discretion of the principle archaeologist. The qualifications of the principle archaeologist shall be approved by DWR. Monitored locations will include the Archaeological High-Probability Areas along Brushy Creek.

Measure 3.5-1f: Should unanticipated finds be uncovered during construction, work in the immediate vicinity must cease until an archaeologist is informed and an assessment of the historic or prehistoric resources is conducted. In the event that Native American human remains or funerary objects are discovered, the provisions of the California Health and Safety Code should be followed. Section 7050.5(b) of the California Health and Safety Code should be implemented in the event that human remains or possible human remains are located.

The County Coroner, upon recognizing the remains as being of Native American origin, is responsible to contact the Native American Heritage Commission within 24 hours. The Commission has various powers and duties to provide for the ultimate disposition of any Native American remains, as does the assigned Most Likely Descendant. Sections 5097.98 and 5097.99 of the Public Resources Code also call for “protection to Native American human burials and skeletal remains from vandalism and inadvertent destruction.” A combination of preconstruction worker training and intermittent construction monitoring by a qualified archaeologist, will achieve compliance with this requirement regarding protection of human remains. Workers will be trained regarding the potential for discovery of cultural or human remains, and both the need for proper and timely reporting of such finds, and the consequences of failure thereof.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project’s contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

SECTION 3.6 AIR QUALITY

IMPACT 3.6-1 CONSTRUCTION IMPACTS

Impact 3.6-1: Construction and demolition activities associated with facility construction would generate short-term emissions of criteria pollutants, including suspended and inhalable particulate matter and equipment exhaust emissions. Less than Significant with Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Measure 3.6-1: DWR shall require the contractor to prepare and implement a Dust Abatement Program to minimize fugitive dust generation. At a minimum, contractor(s) shall include the following measures as applicable¹:

BAAQMD Basic Control Measures

- Water all active construction sites at least twice daily, and more often on days when winds exceed 10 to 15 miles per hour (mph).
- Cover all trucks hauling soil, sand, and other loose materials *or* require all trucks to maintain at least 2 feet of freeboard.
- Pave, apply water three times daily, or apply non-toxic chemical soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.
- Sweep daily with water sweepers all paved access roads, parking areas, and staging areas at construction sites.
- Sweep streets daily with water sweepers if visible soil material is carried onto adjacent public streets.
- Enclose, cover, water twice daily, or apply non-toxic chemical soil binders to exposed stockpiles (dirt, sand, etc.).
- Limit the speed of all construction vehicles to 15 mph while on unpaved roads at the project site.

In addition to the Basic Control Measures, the following measures, as applicable, will be implemented because the construction site is greater than 4 acres in area and is located near sensitive receptors:

- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).

¹ Control measures for construction emissions of PM10 were selected from BAAQMD's *CEQA Guidelines for Assessing the Air Quality Impact of Projects and Plans*.

- Enclose, cover, water twice daily or apply (non-toxic) chemical soil stabilizers to exposed stockpiles (dirt, sand, etc.).
- Limit traffic speeds on unpaved roads to 15 mph.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.
- Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving a construction site.
- Install wind breaks, or plant trees/vegetative wind breaks at windward side(s) of construction areas.
- When winds (instantaneous gusts) exceed 25 mph, watering will need to occur more frequently.
- Limit the area subject to excavation, grading, and other construction activity at any one time.
- Pave all roadways, driveways, sidewalks, etc. as soon as practical. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Designate a person or persons to monitor the dust control program and order increased watering, as necessary, to prevent transport of dust offsite. The name and telephone number of such persons shall be provided to the BAAQMD prior to the start of construction.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

SECTION 3.7 NOISE

IMPACT 3.7-1 INCREASED NOISE LEVELS - CONSTRUCTION

Impact 3.7-1: Construction activities would intermittently and temporarily generate noise levels above existing ambient levels in the project vicinity. Less than Significant with Mitigation.

MITIGATION

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. These measures will mitigate the above impact to a less than significant level.

Measure 3.7-1a: For Brushy Creek Pipeline along Dyer Canal (Sta 172+00 to Sta 197+00), Dyer Reservoir, and Canal Improvements, construction contractors shall adhere to the Alameda County General Code, Title 6 Health & Safety, Chapter 6.60 Noise, Sections 6.60.070(E) and 6.60.070(G):

- Construction hours shall be limited to between the hours of 7:00 a.m. and 7:00 p.m. on weekdays and 8:00 a.m. and 5:00 p.m. on Saturdays and Sundays; and
- All equipment used on the project shall be muffled and maintained in good operating condition. All internal combustion engine-driven equipment shall be fitted with intake and exhaust mufflers which are in good condition.

Measure 3.7-1b: Construction contractors shall locate fixed construction equipment such as compressors as far as possible from noise-sensitive receptors during construction.

With mitigation, construction activities would still increase ambient noise levels along the project corridors. However, mitigation would reduce the increase in noise due to construction and would reduce the chance of exposing people to substantial noise levels. Because of the limited and non-permanent duration of the impact, the residual impact would be less than significant.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.7-2 CONSTRUCTION TRUCK TRAFFIC

Impact 3.7-2: Construction truck traffic would generate noise levels above existing ambient levels along haul routes used to transport excavated materials. Less than Significant with Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Measure 3.7-2: Implement Measure 3.7-1a.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.7-4 VIBRATION

Impact 3.7-4: Construction activities such as shoring, grading, excavation and controlled detonation could result in vibration impacts which could affect adjacent structures and create human annoyance. Less than Significant with Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Measure 3.7-4. In the event that controlled detonation is required in order to effectively remove bedrock, DWR shall require contractors to comply with Bureau of Mines criteria of 2.0 in/s (high frequency >40 Hz) or 0.5 in/s (low frequency <40 Hz), or more stringent criteria as applicable for individual facilities.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

SECTION 3.8 TRAFFIC AND CIRCULATION

IMPACT 3.8-1 INCREASED VEHICLE TRIPS

Impact 3.8-1: Construction activities would intermittently and temporarily generate increases in vehicle trips by construction workers and construction vehicles on area roadways and would require single lane closures on major roadways. Less than Significant with Mitigation.

MITIGATION

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. These measures will mitigate the above impact to a less than significant level.

Measure 3.8-1a: DWR shall obtain the necessary road encroachment permits prior to construction and will comply with the applicable conditions of approval. Road encroachment permits may be necessary on the following roadways: Patterson Pass Road, Tesla Road and Mines Road.

Measure 3.8-1b: DWR will require the contractor to prepare a Traffic Control Plan in accordance with professional engineering standards prior to construction. The Traffic Control Plan could include the following requirements:

- DWR shall post advanced warning of construction activities to allow motorists to select alternative routes in advance.
- DWR shall arrange for a telephone resource to address public questions and complaints during project construction.
- DWR shall comply with roadside safety protocols, so as to reduce the risk of accident.
- For roadways requiring single lane closures, DWR (and the construction contractor) shall maintain alternate one-way traffic flow and utilize flagger-controls.

Measure 3.8-1c: During periods when Dyer Road is used by project construction trucks, DWR shall install warning signs (in compliance with County permit conditions) on Altamont Pass Road in advance of the Dyer Road intersection to alert drivers of slow-moving trucks turning onto Altamont Pass Road.

Measure 3.8-1d: During periods when Dyer Road is used by project construction trucks, DWR shall install warning signs on Dyer Road in advance of the train trestle to alert drivers of narrowed pavement width at the trestle undercrossing.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.8-3 INCREASED TRAFFIC HAZARDS

Impact 3.8-3: Construction activities would intermittently and temporarily increase potential traffic safety hazards for vehicles, bicyclists and pedestrians on public roadways. Less than Significant with Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Measure 3.8-3: DWR or its contractors shall obtain the necessary road encroachment permits prior to construction and will comply with the applicable conditions of approval. As deemed necessary by the governing jurisdiction, the road encroachment permits will require the contractor to prepare a traffic control plan in accordance with professional engineering standards prior to construction (see **Measure 3.8-1b**).

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.8-4 ROAD SURFACE

Impact 3.8-4: Construction activities would increase wear-and-tear on the designated haul routes used by construction vehicles to access the project work sites. Less than Significant with Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Measure 3.8-4: DWR and the affected jurisdiction(s) shall enter into an agreement prior to construction that will detail the pre-construction conditions and the post-construction requirements of the rehabilitation program. Roads damaged by construction would be repaired to a structural condition equal to that which existed prior to construction activity.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

SECTION 3.9 HAZARDOUS MATERIALS

IMPACT 3.9-1 EXCAVATION OF CONTAMINATED MATERIALS

Impact 3.9-1: Construction excavation could encounter contaminated materials, causing an increase in risk of exposure (human and the environment) to hazardous materials. Less than Significant with Mitigation.

MITIGATION

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. These measures will mitigate the above impact to a less than significant level.

Measure 3.9-1a: DWR shall incorporate into contract specifications, the requirement that, in the event that previously unidentified hazardous substances are encountered during construction, the contractor(s) will have a contingency plan for sampling and analysis of potentially hazardous substances and will coordinate with the appropriate regulatory agencies, if necessary. Evidence of potential hazardous contamination includes soil discoloration, noxious odors, presence of underground storage tanks, or buried building material. The required disposal method shall depend on the types and concentrations of chemicals identified in the soil. Any site investigations or remediation shall comply with applicable laws.

Measure 3.9-1b: If unknown USTs are discovered during construction, the UST, associated piping, and impact soil shall be removed by a licensed and experienced UST removal contractor. The UST and contaminated soil shall be removed in compliance with applicable county and state requirements governing UST removal.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.9-2 HAZARDOUS CONSTRUCTION MATERIALS

Impact 3.9-2: Construction activities requiring the use of hazardous materials may increase the risk of exposure to hazardous materials. Less than Significant with Mitigation.

MITIGATION

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. These measures will mitigate the above impact to a less than significant level.

Measure 3.9-2a: Consistent with Storm Water Pollution Prevention Plan requirements identified in **Measure 3.2-1a**, DWR shall require the contractor to implement best management practices for handling hazardous materials onsite. The use of construction best management practices would minimize the potential negative effects on groundwater and soils, and will include the following:

- Follow manufacturer's recommendations and regulatory requirements for use, storage and disposal of chemical products and hazardous materials used in construction;

- Avoid overtopping construction equipment fuel gas tanks;
- During routine maintenance of construction equipment, properly contain and remove grease and oils.
- Properly dispose of discarded containers of fuels and other chemicals.

Measure 3.9-2b: In the event of an inadvertent release of hazardous materials during project operations, containment and cleanup shall occur in accordance with the applicable regulatory requirements.

Measure 3.9-2c: Oil and other solvents used during maintenance of construction equipment shall be recycled or disposed of in accordance with all applicable regulatory requirements. All hazardous materials shall be transported, handled, and disposed of in accordance with all applicable regulatory requirements.

Measure 3.9-2d: Abrasive blasting, or water blasting and metal work including weldings, cutting, and torch burning that involves removal of lead-based paints or primers shall be completed in strict compliance with worker safety regulations outlined in OSHA’s Lead in Construction Standard, Title 8 CCR 1532.1, as applicable. Implementation of BMPs including, but not limited to, constant light water spray, structure tenting, or fume hoods, would capture vapors, fumes, and dust generated from the painted metal work. Water, soil, or other media contaminated by lead dusts and fumes shall be removed from the site and disposed. Excavations to capture spray or high-pressure stripping water shall be lined with impermeable materials (i.e., plastic sheeting) and constructed to direct water to lined sumps. Water in sumps shall be pumped into storage tanks prior to removal and disposal to an appropriate treatment, storage and disposal facility. Verification soil samples shall be collected in fall-out area following project completion to document the presence or absence of residual lead.

Measure 3.9-2e: A construction health and safety plan shall be prepared which describes hazardous materials used during construction and their associated health hazards, as required by the California Occupational Safety and Health Administration.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project’s contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.9-3 WILDLAND FIRE HAZARD

Impact 3.9-3: Construction activities in grassland areas would have the potential to expose people or equipment to risk of loss, injury, or death involving wildland fires. Less than Significant with Mitigation.

MITIGATION

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. These measures will mitigate the above impact to a less than significant level.

Measure 3.9-3a: DWR will work closely with local fire districts to develop a fire safety plan which describes various potential scenarios and action plans in the event of a fire.

Measure 3.9-3b: During construction all staging areas, welding areas, or areas slated for development using spark producing equipment, will be cleared of dried vegetation or other materials that could serve as fuel. Any construction equipment that includes a spark arrestor will be equipped with an arrestor in good working order.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

SECTION 3.10 PUBLIC SERVICES AND UTILITIES

IMPACT 3.10-1 WATER DELIVERY DISRUPTIONS

Impact 3.10-1: Construction of the proposed facilities could result in temporary, planned or accidental disruption of water deliveries to the three South Bay Contractors: Zone 7 Water Agency, Alameda County Water Agency, and Santa Clara County Water Agency. Less than Significant with Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Measure 3.10-1: Consistent with its current operational practices, DWR shall coordinate construction activities and delivery outage schedules with SBA Contractors and other affected agencies, as appropriate.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.10-2 UTILITY DISRUPTIONS

Impact 3.10-2: Pipeline construction could result in temporary, planned or accidental disruption to utility services. Less than Significant with Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Measure 3.10-2: A detailed study identifying utilities along the affected portions of the project alignment shall be conducted during the design stages of the project to complement the existing utilities study for the disturbed portions of the project alignment. For locations with adverse impacts, the following mitigations will be implemented:

- a. Utility excavation or encroachment permits shall be acquired from the appropriate agencies. These permits include measures to minimize utility disruption. DWR and its contractors shall comply with permit conditions, and such conditions shall be included in construction contract specifications.
- b. Utility locations shall be verified through field survey (potholing) and use of the Underground Service Alert services.
- c. Detailed specifications shall be prepared as part of the design plans to include procedures for the excavation, support, and fill of areas around utility cables and pipes. All affected utility services shall be notified of DWR's construction plans and schedule. Arrangements shall be made with these entities regarding protection, relocation, or temporary disconnection of services.
- d. DWR shall employ special construction techniques in areas where the pipeline would parallel underground utility lines. These special measures, which would be included in the engineering specifications, should include trench wall-support measures to guard against trench wall failure and possible resulting loss of structural support for the excavated areas.
- e. Residents and businesses in the SBA project corridor shall be notified of any planned utility service disruption two to four days in advance, in conformance with county and State standards.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.10-3 UTILITY CONFLICTS

Impact 3.10-3: Construction may result in utility conflicts or require relocation of existing utilities. Less than Significant with Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Measure 3.10-3: In conjunction with **Measure 3.10-1**, the following measures shall be implemented:

- Disconnected cables and lines shall be reconnected promptly.
- DWR shall observe DHS standards which require (1) a 10-foot horizontal separation between parallel sewer and water mains (gravity or force mains); (2) 1-foot vertical separation between perpendicular water and sewer line crossings. (In the event that separation requirements could not be maintained, DWR shall obtain DHS variance through provisions of sewer encasement, or other means deemed suitable by DHS.); and (3) encasing sewer mains in protective sleeves where a new water line crosses under or over an existing wastewater main.
- DWR shall coordinate final construction plans and specifications with affected utilities such as PG&E and DHS Sanitary Engineering Branch.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.10-5 WIND TURBINE ACCESS

Impact 3.10-5: Construction operations would potentially disrupt access to wind turbines in the Dyer Road area. Less than Significant with Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Measure 3.10-5: Implement **Measures 3.4-1a** and **3.4-1b** in **Section 3.4, Land Use, Planning and Recreation**; and **Measures 3.8-1a through 3.8-1d** in **Section 3.8, Traffic and Circulation**.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.10-6 DEMAND FOR SERVICES

Impact 3.10-6: Construction activities for all facilities could require short-term police and fire protection services to assist in traffic management or in the event of an accident. Less than Significant with Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Measure 3.10-6: DWR shall provide, upon request, a copy of the Traffic Control Plan to the County sheriff's department, local police departments, County fire department, and local fire departments for their review prior to construction. DWR shall provide 72-hour notice to the local service providers prior to construction of individual pipeline segments. Discussion on the Traffic Control Plan is provided in **Section 3.8, Traffic and Circulation**, under **Measure 3.8-1b**.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

SECTION 3.11 VISUAL RESOURCES

IMPACT 3.11-1 DIMINISHED VISUAL AESTHETICS

Impact 3.11-1: Proposed facilities could diminish the visual aesthetics at certain proposed sites. Less than Significant with Mitigation.

MITIGATION

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. These measures will mitigate the above impact to a less than significant level.

Measure 3.11-1a: Following construction activities, the Department of Water Resources (DWR) shall restore disturbed areas by reestablishing existing topography and reseeding with a native seed mix typical of the immediately surrounding area.

Measure 3.11-1b: DWR shall use design elements to enhance visual integration of the proposed above-ground facilities with their surroundings. Proposed facilities shall be painted low-glare earth-tone colors that blend with the surrounding terrain.

Measure 3.11-1c: DWR shall ensure that lighting used for nighttime construction is shielded and directed downward to minimize impacts to neighboring residential areas.

Measure 3.11-1d: DWR shall construct berms around the reservoir and vegetate the berms with native seed mixes.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 3.11-1 LIGHT

Impact 3.11-2: Construction of the project components would introduce new sources of light onto the project sites and increase ambient light in the SBA project corridor. Less than Significant with Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Measure 3.11-2a: DWR shall ensure that all exterior lighting is shielded and directed downward to minimize impacts to neighboring residential areas. If necessary, landscaping shall be provided around proposed facilities. The vegetation shall be selected, placed, and maintained to minimize off-site light and glare onto surrounding areas. In addition, highly reflective building materials and/or finishes shall not be used in the designs for proposed structures.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

SECTION 5.0 CUMULATIVE IMPACTS

IMPACT 5.4 CUMULATIVE LONG-TERM SPECIAL STATUS SPECIES IMPACTS

Impact 5.4: Concurrent construction of projects within the Altamont Foothills, and capital improvement and development projects within the Livermore Valley, would result in cumulative long-term impacts to sensitive grassland, wetland and vernal pool habitats, with secondary effects to special-status species, including: San Joaquin kit fox, burrowing owl, California red-legged frog, and California tiger salamander, fairy shrimp and fragrant fritillary and nesting sensitive birds. Less than Significant with Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Measure 5.4: Implement **Measures 3.3-1** and **3.3-2c**.

FINDINGS

Based on the Final EIR and the entire record before DWR, the Board finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 5.5 CUMULATIVE LONG-TERM LAND USE IMPACTS

Impact 5.5: Concurrent construction of projects within the Altamont Foothills, and capital improvement and development projects within the Livermore Valley, could result in cumulative long-term impacts to land use. Less than Significant with Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Measure 5.5: Implement **Measures 3.4-2a** and **3.4-2b**.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 5.6 CUMULATIVE LONG-TERM CULTURAL IMPACTS

Impact 5.6: Concurrent construction of projects within the Altamont Foothills, and capital improvement and development projects within the Livermore Valley, could result in cumulative long-term impacts to cultural resources. Less than Significant with Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Measure 5.6: Implement **Measures 3.5-1** and **3.5-2**.

FINDINGS

Based on the Final EIR and the entire record before DWR, DWR finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

IMPACT 5.7 CUMULATIVE LONG-TERM CULTURAL IMPACTS

Impact 5.7: Concurrent construction of projects within the Altamont Foothills, and capital improvement and development projects within the Livermore Valley, could result in cumulative long-term impacts to visual resources. Less than Significant with Mitigation.

MITIGATION

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Measure 5.7: Implement **Measures 3.11-1** and **3.11-2**.

FINDINGS

Based on the Final EIR and the entire record before DWR, the Board finds that measures have been incorporated, which will substantially lessen the Proposed Project's contribution to the significant environmental effect identified in the Final EIR, reducing it to a less than significant level.

EXHIBIT C

FINDINGS OF FACT CONCERNING PROJECT ALTERNATIVES

C.1 INTRODUCTION

CEQA requires that an EIR “describe a range of reasonable alternatives to the project or to the location of the project, which could feasibly attain the basic objectives of the project...” CEQA Guidelines §15126 (d). If a project alternative will substantially lessen the significant environmental effects of a proposed project, the decision maker should not approve the proposed project unless it determines that specific economic, legal, social, technological, or other considerations,... make the project alternative infeasible.” Public Resources Code §21002, CEQA Guidelines §15091(a)(3). The Final EIR evaluated alternative approaches to accomplishing the objectives of the project. The findings with respect to the alternatives identified in the Final EIR are identified below.

C.2 PROJECT OBJECTIVES

The primary objective of the proposed project is to increase the capacity of the South Bay Aqueduct to provide additional conveyance. This would allow Zone 7 to meet seasonal demand projections under approved general plans in its service area. This increased capacity would also serve supply needs during emergencies and maintenance.

The proposed project would also satisfy operational objectives specified below:

- Provide Conveyance Capacity Necessary to Meet Treated and Untreated Demands Associated with Buildout under the Approved General Plans within the Zone 7 service area. Water demands associated with buildout under the approved General Plans in the Zone 7 service area were estimated in the *Water Supply Planning Study Update*. This analysis identified a long-term annual water demand of 100,300 af to meet buildout demands. Conveyance capacity necessary to meet this annual demand was identified in the *Water Conveyance Study*, prepared by Camp, Dresser and McKee. This analysis identified a conveyance capacity need of 430 cfs within the SBA to meet projected demands at buildout. From this analysis, Zone 7 requested a capacity increase of 130 cfs. No additional capacity has been identified for the other two SBA Contractors (ACWD and SCVWD).
- Increase Operational Reliability for SBA Contractors. The Proposed Project would construct the 3rd Stage of the SBPP and Brushy Creek Pipeline system, providing adequate conveyance capacity and redundancy to continue a substantial portion of SBA operations in the event that one of the three pipelines is taken out of service for either maintenance or under an emergency scenario. Currently, maintenance requires substantial reductions in

delivery capacity. Additionally, provision of storage in the upper reaches of the SBA would provide operational flexibility for future and existing treatment facilities.

- Provide Adequate Freeboard Along Canals. DWR requires a 3- to 4-foot freeboard criteria for canal facilities, which is not currently available at design capacity along the SBA due to canal degradation and design deficiencies.
- Provide Off-Peak Power Efficiency. Within the context of recent power shortages, design facilities to minimize power demands during peak power periods. Current design of the SBA system does not provide for diurnal variation of pumping rates. Dyer Reservoir provides an opportunity to increase daily off-peak pumping at the SBPP, thereby reducing power demand during peak load periods.
- Provide Water Quality Benefits. Project implementation would provide additional conveyance capacity, allowing Zone 7 to import and recharge water with lower total dissolved solids during spring months. This is a key objective for Zone 7's groundwater management. Additionally, control of drainage currently entering the SBA canals and Bethany Forebay Inlet Channel would reduce sediment loads.

C.3 REASONABLE RANGE OF ALTERNATIVES.

In general, there are two types of alternatives that may be reviewed in an EIR: (1) alternatives *to* the project that are other projects entirely, or other approaches to achieving the project objectives rather than the project or modified project; and (2) alternatives *of* the project that include modified project components, such as alternative project sites or processes and/or modified facilities, layout, size, and scale. This alternatives analysis phase of the project evaluated both types of alternatives in order to develop a reasonable range of alternatives for evaluation in this EIR.

In accordance with the CEQA Guidelines, the alternatives considered in the certified EIR include those that 1) could accomplish most of the basic objectives of the project, and 2) could avoid or substantially lessen one or more of the significant effects of the project. Additionally, the No Project Alternative, which is required under CEQA 15126(d)(2), was examined.

C.3.1 NO PROJECT ALTERNATIVE

Discussion of the No-Project Alternative must examine the existing conditions and reasonably foreseeable future conditions that would exist if the project were not approved (CEQA §15126.6(e)). Under the No Project Alternative, DWR would not implement construction of facilities identified under the Proposed Project to increase design capacity to 430 cfs. As such, impacts identified in Draft EIR **Chapter 3**, and summarized above in Draft EIR **Section 6.1.2**, would be avoided.

Under the No Project Scenario, reasonably foreseeable future condition, Zone 7 would continue to face a shortfall in the conveyance capacity necessary to meet buildout demands under the approved General Plans within the Zone 7 service area. As demands increase over time, Zone 7

would continue to review other conveyance options, and would likely select for implementation one of the alternatives identified in the *Zone 7 Water Conveyance Study*. These alternatives, and their potential environmental impacts, are further discussed in Draft EIR **Section 6.2.3**, below.

FINDINGS

Implementation of the No Project Alternative would not meet any of the stated project objectives, and would not address conveyance capacity shortfalls associated with the SBA system. Zone 7 would be unable to meet service demands associated with development under the approved General Plans within its service area, operational flexibility associated with new facilities in the upper reaches of the SBA would not be improved, and the energy saving benefits associated with off-peak pumping would not occur. This alternative is not considered superior to the proposed project, because it would not meet the stated project objectives.

Under the No Project Scenario, reasonably foreseeable future condition, Zone 7 would continue to face a shortfall in the conveyance capacity necessary to meet buildout demands under the approved General Plans within the Zone 7 service area. As demands increase over time, Zone 7 would continue to review other conveyance options, and would likely select for implementation of one of the alternatives identified in the *Zone 7 Water Conveyance Study*. These alternatives, and their potential environmental impacts, are further discussed below. As noted in this discussion, these alternatives were screened for economics/capital costs, reliability/flexibility, implementation, and environmental factors, and were not identified as superior to the Proposed Project from either an overall, or purely environmental, standpoint.

C.3.2 IMPROVEMENTS PROJECT ONLY ALTERNATIVE

Under this alternative, DWR would implement the Improvements component of the Proposed Project to meet the SBA facility design capacity of 300 cfs. These facilities would be limited to those improvements necessary for DWR to meet its contractual obligation of 300 cfs to the SBA Contractors. DWR has a contractual obligation under its Water Service Agreement to provide a delivery capacity of 300 cfs to the three SBA Contractors, and the 3 SBA Contractors have a contractual obligation to pay for maintenance of the SBA system through their annual State Water Contractor billings. These improvements would be limited to improvements at the SBPP pumping plant to install a spare (45 cfs) pumping unit and connect it to the Stage 2 manifold, improvements to the Stage 2 surge tank, and raising of the Dyer Canal, Livermore Canal, Patterson Reservoir and Alameda Canal lining approximately 1.0 foot.

Impacts related to this alternative would be limited to minor short-term construction effects at SBPP and the Stage 2 Surge Tanks. Impacts associated with construction of the Stage 3 Brushy Creek Pipeline and Dyer Reservoir would be avoided. Construction impacts along the Dyer, Alameda, and Livermore Canals would be similar to, but incrementally reduced, from those associated with raising of the canal lining under the Proposed Project. No improvements to check structures, siphons or drainage overchutes would be implemented; therefore, impacts identified for the Proposed Project related to these facility improvements would be avoided.

FINDINGS

Although the level of impacts associated with this alternative would be less than those identified for the Proposed Project, implementation of this alternative would not meet any of the stated project objectives, other than the re-establishment of the SBA system design capacity of 300 cfs. Zone 7 would be unable to meet service demands associated with development under the approved General Plans within its service area and operational flexibility associated with Stage 3 Brushy Creek Pipeline and provision of storage in the upper reaches of the SBA would not be improved. In addition, the energy saving benefits associated with the ability to shift 38,000 MW hours annual to off peak periods would not occur. Therefore, this alternative is not considered superior to the proposed project because it would not meet the stated project objectives.

C.3.3 ZONE 7 UNTREATED WATER CONVEYANCE ALTERNATIVES ANALYSIS OVERVIEW

In 2000, following completion of the *Water Supply Planning Study Update* and the *Zone 7 Water Supply Planning Program – Program EIR*, Zone 7 conducted an extensive analysis of potential conveyance mechanisms for delivery of SWP water into its service area. The objective of this analysis was to identify Zone 7's conveyance capacity needs to meet municipal and other demands at buildout under the approved General Plans within its service area, and to examine potential alternatives to provide this necessary capacity. This analysis, the *Water Conveyance Study* prepared by Camp Dresser and McKee identified a conveyance capacity need of an additional 130 cfs to meet demands within the Zone 7 service area at buildout under the approved General Plans within its service area. In order to meet this conveyance capacity need, Zone 7 examined a wide range of project types, including increased storage within its service area, increased conveyance capacity, and a combination of these two primary options. Specific alternatives reviewed are summarized in Draft EIR **Table 6-1**, and are more thoroughly discussed in Draft EIR **Section 6.0**. After screening the individual facility alternatives, these facilities were then combined to meet the system-wide needs for Zone 7. In order to evaluate these combined facilities, five operational scenarios were developed. The scenarios identify different ways to meet the future system requirements. Each of the scenarios includes different sizes and combinations of the storage and transmission facilities. The five scenarios include:

- A. Maximize the SBA utilizing the existing capacity and enlargement of specific sections, as necessary.
 - A-1. No Zone 7-owned or operated In-Valley Conveyance System
 - A-2. Partial In-Valley Conveyance System. In Valley Conveyance from SBA to the vicinity of Lake A.
 - A-3. Full In Valley Conveyance System. SBA to Lake I.
- B. Reduce South Bay Aqueduct enlargement by shifting the South Livermore untreated water demands to In-Valley Conveyance. Untreated supply for summer peaking could be from groundwater, the Chain of Lakes, or recycled supply.

**TABLE 6-1
STORAGE AND TRANSMISSION FACILITIES EXAMINED - UNTREATED WATER CONVEYANCE ALTERNATIVES STUDY**

Proposed Facilities	Location	Description
<i>Storage Alternatives</i>		
Del Valle Reservoir Storage	South Bay Aqueduct and Del Valle Reservoir	<ul style="list-style-type: none"> Use the 11,000 acre-feet provided by storage in Del Valle Reservoir.
Upper Del Valle Reservoir	Upstream of Del Valle Reservoir	<ul style="list-style-type: none"> 10,500 af or 15,000 af storage reservoir. Winter storage of SWP water, for release during peak summer months
Doolan Canyon Reservoir	Along Doolan Road, Alameda County	<ul style="list-style-type: none"> 9,000 af or 15,000 af storage reservoir to store SBA water for release to SBA in summer. Raw water pipeline connection from SBA to reservoir; Convey water from SBA to In-Valley Conveyance
<i>Main Basin Conjunctive Use</i>		
<ul style="list-style-type: none"> Well Master Plan 	Groundwater basin within Zone 7 service area	<ul style="list-style-type: none"> Storage of treated or untreated water. Supplies injected and extracted from the Aquifer Storage and Recovery (ASR) wells and pumped into Zone 7 transmission / distribution systems. Construction of wells within the Main Basin, primarily within the City of Pleasanton
<ul style="list-style-type: none"> Chain-of-Lakes 	South of I-580 between Tassajara Rd/Valeccitos Rd	<ul style="list-style-type: none"> Seasonal storage of natural inflow, Del Valle Reservoir water, SBA water, Doolan Reservoir water, or recycled water if acceptable to community. Provides both storage for agricultural uses with In-Valley Conveyance, and groundwater recharge.
<i>Transmission Alternatives</i>		
<i>SBA Parallel Pipeline</i>		
<ul style="list-style-type: none"> Brushy Creek Pipeline 	Parallel to SBA between Bethany Res. and Dyer Road	<ul style="list-style-type: none"> Construction of a pump station in the vicinity of Bethany Reservoir Construction of an approximately 3.73 mile pipeline between Bethany Reservoir and Dyer Road
<ul style="list-style-type: none"> Dyer-Alameda Canal 	Parallel to SBA from Dyer Road to Del Valle Turnout	<ul style="list-style-type: none"> Construction of approximately 13.5 miles of new pipeline parallel to the existing SBA.
SBA Intermediate Improvements	Specific sections of the SBA between Bethany Reservoir and Del Valle Reservoir	<ul style="list-style-type: none"> Increase freeboard of canal sections, modify siphon at canal/pipe transitions, or replacement of smaller diameter pipelines at specific locations.
In-Valley Conveyance	Livermore and unincorporated Alameda Co.	<ul style="list-style-type: none"> Construction of 6 to 13 miles of new pipeline and 2 Pump Stations Provide capacity for delivery of recycled water, groundwater, or Chain-of-Lakes storage to agricultural customers.

SOURCE: CDM, 2000

- C. Reduce SBA enlargement and use of Del Valle Reservoir Storage for summer peaking.
- D. Reduce SBA enlargement using other local storage.
 - D-1. Upper Del Valle Reservoir
 - D-2. Doolan Canyon Reservoir
- E. Increased use of main groundwater basin to meet summer peak demands.

FINDINGS

These Scenarios were screened for economics/capital costs, reliability/flexibility, implementation, and environmental factors. Based on the comparison of the different scenarios, Scenario A, which includes maximizing the use of the SBA through enlargement, was recommended as the most effective scenario to meet the future conveyance requirements for Zone 7. Scenario A provides the best approach to meeting long-term Zone 7 needs based on the level of reliability and flexibility provided by these facilities, the overall cost of both capital costs and maintenance costs, the ability to phase Scenario A facility improvements as necessary, and the level of environmental effects. Therefore, this alternative was considered superior for implementation.

C.4 SBA FACILITY ALTERNATIVES

The following constitute facility alternatives to the Proposed Project, and have been reviewed to identify which facility alternatives can avoid or reduce the environmental impacts of the Proposed Project and still meet the basic project objectives.

C.4.1 SOUTH BAY PUMPING PLANT AND BRUSHY CREEK PIPELINE ALTERNATIVES

C.4.1.1 BRUSHY CREEK PIPELINE NORTHERN ALIGNMENT

This alternative would include construction of a pumping station on the west side of the California Aqueduct upstream of the Bethany Reservoir (see Draft EIR **Figure 6-5**). This pump station location is located on an approximately 5 acre area approximately 7,200 feet upstream of the current SBPP Bethany Reservoir inlet. The pipeline route would extend west from this location approximately 4.2 miles to the Dyer Reservoir site, which is approximately 0.5 miles longer than the Proposed Project. From the pump station, the pipeline would extend 1,700 feet across undeveloped land to an existing access road for wind power facilities, continuing along this roadway alignment approximately 3,000 feet. The pipeline would then continue up the eastern face of a small foothill approximately 1,700 feet to meet the existing SBA easement. From this point the pipeline would extend west parallel to and north of the existing SBA approximately 6,800 feet to the dirt road extension of Dyer Road. The pipeline would follow this alignment for approximately 1,600 feet to Brushy Creek, where it would trench across Brushy Creek. The pipeline would extend upslope approximately 800 feet west of the Brushy Creek to

avoid lateral installation on high slope areas along the creek, and then would extend south approximately 7,500 feet for a second trench crossing of Brushy Creek to route the pipeline back to the eastern side of Dyer Canal for access to Dyer Reservoir.

Implementation of this alignment alternative would require construction of a new pumping plant adjacent to the California Aqueduct. The site is located on the west side of the California Aqueduct, and consists of an alluvial area that receives drainage from upslope areas, and includes a siphon for conveyance of flows under the California Aqueduct. The site is visible from the recreational areas on the east side of Bethany Reservoir. Construction would require redirection of existing drainage patterns at the site, would include the loss of upland habitat for sensitive species, and would result in long-term visual effects to adjacent recreational areas.

FINDINGS

Implementation of this alternative would increase the total disturbance area, and therefore, the total amount of sensitive species habitat, associated with implementation. This alternative would also result in similar disturbance impacts to Brushy Creek. Implementation of this alternative would result in potentially significant impacts to known cultural resources. Implementation of this pump station and alignment would result in substantial new easement acquisition by DWR, and would not consolidate facilities along the existing SBA corridor, which has been previously disturbed. As such, this alternative would not reduce or avoid any of the impacts identified for the Proposed Project, and would likely result in equivalent impacts to biological and significant impacts to known cultural resources. Therefore, although this alternative would meet the project objectives, it is not considered environmentally superior to the Proposed Project.

C4.1.2 BRUSHY CREEK PIPELINE SOUTHERN ALIGNMENT

This alternative would include construction of a pump station south of the Bethany Forebay Inlet Channel, south of the SBPP. The pumping plant would be constructed on an existing 2 acre site that appears to have been established as part of the grading for the SBPP. From this location, the pipeline would extend approximately 3.5 miles west to the Dyer Reservoir. From the pump station site, the pipeline would extend west overland along a narrow drainage approximately 3,500 feet to an existing stock reservoir. The pipeline would then follow a jeep trail alignment west approximately 3,900 feet along a drainage, turning south to follow an access road alignment approximately 5,700 feet over the foothill crest (900 feet msl) to an existing access road associated with wind power facilities. The pipeline would then extend west along this access road alignment approximately 5,600 feet to the Dyer Reservoir site.

Implementation of this alignment would include additional costs of approximately \$1 million related to pipeline length; however, due to the increase elevations, an additional 150 feet of head would be required. This would result in a pumping cost increase of approximately \$3-5 million. Additionally, due to the increased distance to the alignment high point, a surge chamber would be required near the pump station, with an estimated cost of approximately \$2-4 million. These

factors result in an estimated capital cost increase of \$5 million for implementation of this alternative alignment and a pumping cost increase of \$3-5 million.

Implementation of the Southern Alignment Alternative would require construction of a new pumping plant on the southern side of the SBPP inlet. Although a graded pad does exist at this location, substantial grading would be required both to establish an adequate building pad, and to provide intake access to water elevations. The site is directly visible from the recreational areas west of the reservoir. Construction would require redirection of existing drainage patterns at the site, would include the loss of upland habitat for sensitive species, and would result in long-term visual effects to adjacent recreational areas.

FINDINGS

Implementation of this alternative would disturb an equivalent construction area, and therefore, an equivalent amount of sensitive species habitat. Although this alignment would avoid impacts to Brushy Creek, equivalent or greater impacts to wetland area and potential sensitive species habitat would be associated with installation within the unnamed drainage tributary to Bethany Reservoir. Implementation of this pump station and alignment would result in substantial new easement acquisition by DWR, and would not consolidate facilities along the existing SBA corridor, which has been previously disturbed. As such, this alternative would not reduce or avoid any of the impacts identified for the Proposed Project, and would likely result in equivalent or greater impacts to biological resources. Therefore, although this alternative would meet the project objectives, it is not considered environmentally superior to the Proposed Project.

C.4.2 ALTERNATIVE DYER RESERVOIR SITES

C.4.2.1 NO OFF PEAK PUMPING ALTERNATIVE – 100 ACRE-FOOT STORAGE WEST OF DYER CANAL

Under this alternative, a smaller Dyer Reservoir with a capacity of 100 af would be constructed on the western side of Dyer Canal immediately east of and adjacent to Dyer Road. Water would be supplied to the reservoir from Dyer Canal by means of an overflow weir, and operation of the reservoir would be similar to that of the existing Patterson Reservoir. The reservoir would be sized to provide a continuous supply to Zone 7's Altamont Water Treatment Plant. The reservoir size would not be adequate to provide for off-peak pumping. The reservoir would be centered on this parcel. The western edge of the reservoir would front Dyer Road for approximately 800 feet. Excavation for this reservoir alternative is estimated at 440,000 cubic yards. Spoils generated by this alternative would be re-contoured onsite or at areas east of Dyer Canal. Access to the facility would be via the existing Dyer Canal access road to the south. Hydrologic connection to Dyer Canal would be via a 100-foot wide weir structure located on the eastern embankment. Reservoir location and layout are shown in Draft EIR **Figure 6-6**.

Implementation of this alternative would reduce the overall size of the reservoir, thereby reducing overall footprint and excavation requirements. The reservoir embankment would directly front

Dyer Road, and could be perceived as having a more direct visual impact on this roadway. Implementation at this location would also have the potential for effects to wetland areas along the eastern edge of the site, which provide potential breeding habitat for California Tiger Salamander.

FINDINGS

Implementation of this alternative would not provide for off-peak pumping, as the reservoir would not be adequately sized. Therefore, this alternative would not meet one of the stated objectives of the Proposed Project, and benefits associated with the shifting of 38,000 MW hours to off-peak periods annually would not occur. As this alternative would result in potential impacts to biological resources, visual resources, and operational noise, and would not meet all of the stated project objectives, it is not considered environmentally superior to the proposed project.

C.4.2.2 NO PEAK PUMPING ALTERNATIVE – 200 ACRE FOOT STORAGE WEST OF DYER CANAL

This alternative would include construction of a 200 af reservoir on the same site immediately east of and adjacent to Dyer Road. This increased capacity would not be sufficient to provide for off-peak capacity, but would provide for storage at Zone 7's Altamont WTP. The reservoir would be situated, between the roadway and Dyer Canal, and due to its size, would encompass the majority of the parcel. The western edge of the reservoir would front Dyer Road for approximately 1,500 feet. Excavation for this reservoir alternative is estimated at 730,000 cy.

Spoils generated by this alternative would be recontoured onsite or at areas east of Dyer Canal. Access to the facility would be via the existing Dyer Canal access road to the south. Hydrologic connection to Dyer Canal would be via a 100-foot wide weir structure located on the eastern embankment.

Implementation of this alternative would reduce the overall size of the reservoir, thereby reducing the overall footprint and excavation requirements. The reservoir embankment would directly front Dyer Road for approximately 1,500 feet, and could be perceived as having a more direct visual impact on this roadway. Setback advantages of the proposed Dyer Reservoir site, which is located approximately 800 feet east of Dyer Road, would be lost. Implementation at this location would also have the potential for effects to wetland areas along the eastern edge of the site, which provide potential breeding habitat for California Tiger Salamander. A major detriment to this reservoir location is its elevation below Dyer Canal. Although passive flow to the reservoir is possible, flow back to Dyer Canal would require a pump station to lift stored supplies back to the canal. This would require construction and operation of a pumping plant at the reservoir facility. This would result in above ground facilities, and potentially operational noise associated with return flow pumping. This would be in addition to the pumping plant proposed by Zone 7 for the Altamont WTP. The additional cost for construction of a pumping facility at this location is estimated at \$6.7 million.

FINDINGS

Implementation of this alternative would not provide for off-peak pumping, as the reservoir would not be adequately sized. Therefore, this alternative would not meet one of the stated objectives of the Proposed Project, and benefits associated with the shifting of 38,000 MW hours to off-peak periods annually would not occur. As this alternative would result in potential impacts to biological resources, visual resources, and operational noise, and would not meet all of the stated project objectives, it is not considered environmentally superior.

C.4.2.3 500 ACRE FOOT STORAGE – WEST OF DYER CANAL

This alternative would include construction of a 500 af reservoir on the same site immediately east of and adjacent to Dyer Road. This increased capacity would provide for off-peak pumping to the reservoir. The reservoir would be situated, between the roadway and Dyer Canal, and due to its size, would encompass the entire parcel. The reservoir would be formed by open cut excavation and embankments with a maximum height of approximately 15 feet above current grade. The western edge of the reservoir would front Dyer Road for approximately 3,100 feet. Excavation for this reservoir alternative is estimated at 1,220,000 cy. Spoils generated by this alternative would be recontoured onsite or at areas east of Dyer Canal. Access to the facility would be via the existing Dyer Canal access road to the south. The access road would be re-aligned to provide access to Dyer Canal and the private lands to the east of Dyer Canal. Hydrologic connection to Dyer Canal would be via a 150-foot wide weir structure located on the eastern embankment.

FINDINGS

Implementation of this alternative would have an equivalent footprint to the Proposed Project, and would have similar excavation requirements. Embankment size would be equivalent to the Proposed Project. The reservoir embankment would directly front Dyer Road for approximately 3,100 feet, and could be perceived as having a more direct visual impact on this roadway. Setback advantages of the proposed Dyer Reservoir site, which is located approximately 800 feet east of Dyer Road, would be lost. Implementation at this location would also have the potential for effects to wetland areas along the eastern edge and southern edge of the site, which provide potential breeding habitat for California Tiger Salamander. A major detriment to this reservoir location is its elevation below Dyer Canal. Although passive flow to the reservoir is possible, flow back to Dyer Canal would require a pump station to lift stored supplies back to the canal. This would require construction and operation of a pumping plant at the reservoir facility. This would result in above ground facilities, and potentially operational noise associated with return flow pumping. This would be in addition to the pumping plant proposed by Zone 7 for the Altamont WTP. The additional cost for construction of a pumping facility at this location is estimated at \$6.7 million. As this alternative would result in potential impacts to biological resources, visual resources, and operational noise, it is not considered environmentally superior.

C.4.2.4 PATTERSON RESERVOIR

This alternative would involve expansion of the existing Patterson Reservoir to provide an additional 200 acre-feet of storage further downstream in the SBA system, at Zone 7's Patterson Reservoir. Two design configurations for this expansion were reviewed, both involving construction of new embankment to the east on lands currently owned by DWR. Embankments would be similar to the 30-foot high embankments of the existing facility. Under the first configuration, the existing southeastern embankment of the reservoir would be demolished, and the new embankment would extend across the existing DWR access road for Patterson Reservoir to the adjacent parcel. Under the second configuration, a self contained reservoir would be constructed on the adjacent parcel, with a pipeline connection to the existing reservoir. Embankment quantities for both reservoir alternatives is estimated at 190,000 and 80,000 cy, respectively. Expansion of storage at Patterson Reservoir would result in short-term construction impacts at this reservoir site equivalent to those identified for the Proposed Project. The expansion area under either configuration would directly affect known CRLF breeding and aestivation habitat. Visual impacts at this location would also be similar to those associated with the Proposed Project, as implementation would result in reservoir embankments directly fronting Patterson Pass Road.

Implementation at this location would increase the storage level in proximity to the Greenville Fault. Implementation of this alternative would not provide for off-peak pumping, due to the storage location within the South Bay Aqueduct system. Therefore, the benefits of shifting approximately 38,000 MW hours annually to off-peak periods would not occur as a result of enlarging Patterson Reservoir. Additionally, operational flexibility associated with the provision of storage within the upper reaches of the SBA, including the provision of storage for Zone 7's proposed Altamont WTP, would not occur. This storage need is consistent with storage provided to each of the treatment plants on the SBA system (Zone 7's Patterson Pass WTP, Del Valle WTP and SCVWD's Penetentia WTP) by existing reservoir facilities.

FINDINGS

Implementation of this alternative would result in impacts related to visual resources, biological resources, and would place additional storage within the Greenville Fault zone. Because this alternative would result in similar impacts to the Proposed Project, and would not meet the stated objectives of the Proposed Project, it is not considered environmentally superior.

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GEOLOGY, SOILS, AND SEISMICITY

Impact 3.1-1: In the event of a major earthquake in the Bay Area Region, proposed facilities could be subject to ground shaking capable of causing localized collapse or damage of engineered fills, structural damage, pipeline rupture, or equipment topple. Damage to project facilities could result in service interruptions.

Measure 3.1-1: DWR shall update their Earthquake Preparedness and Response Plan to prescribe actions to identify and remedy potential hazards related to earthquake-related equipment topple, employee injury, fire, and equipment failure for the new facilities. The Plan shall include a detailed post-earthquake inspection procedure and schedule to identify conditions that compromise workers safety or could result in extensive service interruptions. In updating the plan, DWR will solicit input from local regulatory agencies and with the Office of Emergency Services (OES). The plan will include public safety measures identified by OES relating to earthquake preparedness.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Update Earthquake Preparedness and Response Plan to prescribe actions to identify and remedy potential hazards related to earthquake-related equipment topple, employee injury, fire, and equipment failure for the new facilities.	1. OES review and approvals.	1. DWR and OES	1. Prior to completion of construction	1.
2. Earthquake Preparedness and Response Plan Update will be coordinated with local regulatory agencies and with the Office of Emergency Services (OES).	2. OES review and approvals.	2. DWR and OES	2. Prior to completion of construction	2.

Impact 3.1-2: Surface fault rupture during an earthquake on the Greenville Fault Zone or along the Las Positas fault could cause structural damage or collapse at proposed facilities.

No Mitigation Required.

Impact 3.1-3: Proposed facilities could be subjected to ground failure due to non-seismic conditions or in the event of an earthquake. Ground failure, including slope failure, differential settlement, or loss of bearing strength, could occur beneath the proposed components resulting in structural or mechanical damage and temporary disruption in service.

No Mitigation Required.

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Impact 3.1-4: Proposed facilities could interfere with and alter shallow groundwater conditions such that existing downstream groundwater conditions change.

No Mitigation Required.

WATER RESOURCES AND WATER QUALITY

Impact 3.2-1: Construction of proposed facilities could result in increased erosion and subsequent sedimentation, with impacts to water quality and/or storm drain capacity. Additionally, discharge of groundwater, release of fuels, or release of other hazardous materials associated with construction activities could degrade water quality.

Measure 3.2-1a: For all project construction components, a SWPPP will be developed for construction activities as required by the State Water Resources Control Board for construction of projects exceeding 5 acres. The objectives of the SWPPP are to identify pollutant sources that may affect the quality of stormwater discharge and to implement control practices to reduce pollutants in stormwater discharges. The SWPPP for this project will include implementation of a minimum of the following elements:

- Source identification
- Preparation of a site map
- Description of construction materials, practices, and equipment storage and maintenance
- List of pollutants likely to contact stormwater
- Estimate of the construction site area
- Erosion and sedimentation control practices including: soils stabilization, re-vegetation, and runoff control to limit increases in sediment in stormwater runoff: such as detention basins straw bales, silt fences, drainage swales, and sand bag dikes
- List of provisions to eliminate or reduce discharge of materials to storm waters
- Description of waste management practices
- Maintenance and training practices

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Incorporate guidelines and requirements for SWPPP into Contract Specifications based on requirements of State Water Resources Control Board	1. Final review and approval of design plans and specifications.	1. DWR	1. During development of specifications	1.
2. Contractor submits SWPPPs to DWR for approval.	2. Review and approval of SWPPP for each site.	2. DWR	2. After contract is awarded, prior to commencing work on a site which requires a SWPPP	2.
3. Monitor construction activities to verify that SWPPP measures are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	3. Sign-off on inspection report and/or MMRP.	3. DWR	3. During construction	3.

Measure 3.2-1b: Dredging Activities. DWR shall acquire appropriate permits for excavation and dredging of Bethany Forebay Inlet Channel, including permits from USACOE, RWQCB, and CDFG, as applicable. DWR shall abide by permit requirements, which may require use of BMPs, such as sediment barriers to isolate work areas from the larger reservoir.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Obtain excavation and dredging permits from USACOE, RWQCB, and CDFG, as applicable.	1. Permit granted to DWR by USACOE, RWQCB, and CDFG.	1. DWR	1. Prior to construction	1.
2. Incorporate permit conditions into Contract Specifications.	2. Final review and approval of design plans and specifications.	2. DWR	2. Prior to construction	2.
3. Monitor construction activities to verify that permit conditions are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	3. Sign-off on inspection reports and/or MMRP.	3. DWR	3. During construction	3.

Measure 3.2-1c: Dredge Material Disposal. Dredged materials shall be disposed of in accordance with *Beneficial Reuse of Dredged Materials: Sediment Screening and Testing Guidelines, Draft Staff Report*.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Confirm with RWQCB that beneficial reuse will be implemented, and appropriate regulations.	1. Prepare and submit sampling plan to RWQCB for sediment characterization.	1. DWR and RWQCB	1. Prior to construction	1.
2. As appropriate, dredged materials shall be disposed of in accordance with <i>Beneficial Reuse of Dredged Materials: Sediment Screening and Testing Guidelines, Draft Staff Report</i> .	2. Prepare and submit reuse plan to RWQCB for review and approval. Acquire permits as appropriate.	2. DWR and RWQCB	2. Prior to construction	2.
3. Implement disposal of sediments	3. Incorporate monitoring into SWPPP or Water Quality Certification, as appropriate	3. DWR	3. During construction	3.

Impact 3.2-2: Installation of the proposed facilities would have the potential to alter drainage patterns, runoff rates, and flow volumes.

Measure 3.2-2a: All proposed facilities shall be designed to include appropriate drainage infrastructure to convey flows generated onsite and from upstream areas. Drainage designs shall be integrated with existing drainage systems, and shall be designed to avoid or minimize effects to downstream areas and infrastructure.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Design facilities to include appropriate drainage infrastructure to convey flows generated onsite and from upstream areas. Drainage designs shall be designed to avoid or minimize effects to downstream areas and infrastructure.	1. Final review and approval of design plans and specifications.	1. DWR	1. During design	1.
2. As part of Operation and Maintenance, drainage facility performance should be periodically inspected with regard to erosion.	2. Document inspections as part of O&M Program	2. DWR	2. Post-construction	2.

Impact 3.2-3: Installation of the proposed facilities would have the potential to alter groundwater flow patterns, with secondary effects to private well operations.

Measure 3.2-3: DWR shall monitor groundwater conditions at the Dyer Reservoir site to ensure that substantial decreases in groundwater levels onsite are not observed following installation of the reservoir structure and sub-drain systems.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Review groundwater levels as part of overall groundwater monitoring program at Dyer Reservoir.	1. Periodic review of groundwater levels as part of groundwater monitoring program	1. DWR	1. Post-construction	1.
2. Prepare annual report summarizing groundwater monitoring results.	2. Review of annual groundwater monitoring report.	2. DWR	2. Post-construction	2.

Impact 3.2-4: Catastrophic failure of Dyer Reservoir as a result of improper design, construction, or operation, would result in potential flooding hazards.

No Mitigation Required.

BIOLOGICAL RESOURCES

Impact 3.3-1: Construction of the Proposed Project would have the potential to affect grassland along the SBA project corridor, including sensitive plant species that may occur. Sensitive plant surveys conducted for all facilities indicate that the Stage 3 Brushy Creek Pipeline would impact 1.0 acres of fragrant fritillary habitat and approximately 400 individual plants.

Measure 3.3-1a: Soil Salvage and Site Restoration. To ensure the re-establishment of California annual grassland disturbed by pipeline installation, the upper 6-12 inches (minimum of 6 inches and maximum of 12 inches based on geology and depth to bedrock) of soil will be salvaged and then placed back onto trenches as the last material added to restore the original contours as practicable and feasible. All disturbed areas will be reseeded with a grassland palette appropriate for the Altamont Foothills and approved by CDFG.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Include soil salvage area into Contract Specifications, including notification of qualified biologist prior to soil disturbance.	1. Final review and approval of design plans and specifications.	1. DWR	1. During design	1.
2. Identify spoil pile location for storage within construction zone into Contract Specifications.	2. Final review and approval of design plans and specifications.	2. DWR	2. During design	2.
3. Incorporate requirement to reseed disturbed areas with a grassland palette appropriate for the Altamont Foothills and approved by CDFG, into Contract Specifications.	3. Final review and approval of design plans and specifications.	3. DWR	3. During development of specifications	3.
4. Post-construction inspection of spoil pile locations and reseeded of disturbed areas.	4. Sign-off on inspection report and/or MMRP.	4. DWR	4. Post-construction	4.

Measure 3.3-1b: Sensitive Plant Mitigation. DWR shall mitigate for population loss through either seed collection and revegetation, or participation in a mitigation bank, as described below:

- **Seed Collection.** Prior to the start of construction, a qualified biologist, working in association with an expert in native plant horticulture, shall harvest and transplant mature fragrant fritillary bulbs to a suitable mitigation site. The mitigation site shall be protected in perpetuity, through a conservation easement or other similar instrument.
- **Mitigation Bank.** Land that supports a known population of fragrant fritillary outside the SBA project corridor shall be purchased at a ratio of 1.5:1, or as established in regulatory permits, and protected in perpetuity.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Establish mitigation site for fragrant fritillary and protect the site in perpetuity through a conservation easement or other similar instrument.	1. Recordation of conservation easement or other similar instrument.	1. DWR	1. During design	1.
2. DWR's Environmental Consultant will harvest and transplant mature fragrant fritillary bulbs to the mitigation site under the supervision of a qualified biologist. Exclusion zones will be identified in plans and specifications which prohibit work in attended areas prior to harvesting and transplanting.	2. After transplanting has been completed.	2. DWR	2. Prior to construction in impacted areas.	2.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
3. If seed collection and revegetation are not available, lands will be purchased from a mitigation bank at a ratio of 1.5:1, or as established in regulatory permits, and protected in perpetuity.	3. Sign-off on inspection report and/or MMRP.	3. DWR	3. Post-construction	3.

Impact 3.3-2: Construction of the Proposed Project could result in impacts to potentially jurisdictional wetlands or waters of the U.S. under the jurisdiction of the USACOE and waters of the state under the jurisdiction of the SWRCB or Regional Water Quality Control Board (RWQCB). The Proposed Project could also result in impacts to the streambed and banks under jurisdiction of CDFG. Potential impacts include sedimentation of channels downstream of the construction areas during trenching and excavating activities, and loss of riparian and instream wetland vegetation.

Measure 3.3-2a: Implement Standard BMPs to Maintain Water Quality and Control Erosion and Sedimentation. Standard measures to maintain water quality and control erosion and sedimentation shall be implemented in Brushy Creek and in wetland areas along the canal alignments, as required by compliance with the General National Pollution Discharge Elimination System (NPDES) Permit for Construction Activities and established by **Measure 3.2-1a**.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Obtain General National Pollution Discharge Elimination System (NPDES) Permit from RWQCB.	1. Permit granted to DWR by RWQCB.	1. DWR	1. Prior to construction	1.
2. Incorporate permit conditions into Contract Specifications.	2. Final review and approval of design plans and specifications.	2. DWR	2. Prior to construction	2.
3. Monitor construction activities to verify that permit conditions are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	3. Sign-off on inspection reports and/or MMRP.	3. DWR	3. During construction	3.

Measure 3.3-2b: Construction within jurisdictional features will require permit approval from the USACOE for fill in wetlands and other waters of the U.S. pursuant to Section 404 of the Clean Water Act. Water quality certification from the RWQCB will also be required pursuant to Section 401 of the CWA. In addition, the CDFG has jurisdiction pursuant to Sections 1601-1603 of the Fish and Game Code, and the pipeline construction in Brushy Creek will require a Streambed Alteration Agreement from CDFG. Terms and conditions of the permits will include measures to protect and maintain water quality, restore work sites, and mitigate for permanent and temporary wetland impacts.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Obtain permits from USACOE, RWQCB, and CDFG.	1. Permits granted to DWR by USACOE, RWQCB, and CDFG.	1. DWR	1. Prior to construction	1.
2. Incorporate permit conditions into Contract Specifications.	2. Final review and approval of design plans and specifications.	2. DWR	2. Prior to construction	2.
3. Monitor construction activities to verify that permit conditions are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	3. Sign-off on inspection reports and/or MMRP.	3. DWR	3. During construction	3.

Measure 3.3-2c: To offset the permanent impacts to wetlands and other waters of the U.S., compensatory mitigation will be provided as required by regulatory permits. Mitigation would be provided through one of the following mechanisms:

- Purchase or dedication of land to provide suitable wetland restoration or creation. If restoration is available and feasible, then a ratio of 2:1 would be proposed. If creation is required, a 3:1 ratio will be implemented to off-set losses. Where practical and feasible, on-site mitigation will be implemented.
- A wetland mitigation and monitoring plan will be developed that will outline mitigation and monitoring obligations for temporary and permanent impacts to wetlands and other waters as a result of construction activities. This Plan will include thresholds of success, monitoring and reporting requirements, and site specific plans to compensate for wetland losses resulting from the project. The mitigation and monitoring plan will be submitted to the appropriate regulatory agencies for approval.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Purchase or dedicate land to provide suitable wetland restoration or creation.	1. Recordation of conservation easement or other similar instrument.	1. DWR	1. Post-construction	1.
2. Develop a wetland mitigation and monitoring plan to outline mitigation and monitoring obligations for temporary and permanent impacts to wetlands and other waters as a result of construction activities.	2. Approval of mitigation and monitoring plan by USACOE, RWQCB, and CDFG.	2. DWR, USACOE, RWQCB, and CDFG	2. Prior to construction	2.

Impact 3.3-3: Construction of the Proposed Project would result in temporary and permanent loss of potential habitat for San Joaquin kit fox.

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Measure 3.3-3a: The following measures are derived from the USFWS *Standardized Recommendations for Protection of the San Joaquin kit fox* (USFWS, 1997b). These measures shall be implemented for construction at the SBPP, Brushy Creek Pipeline, and Dyer Reservoir site.

- Preconstruction surveys will be conducted within 200-feet of work areas to identify potential kit fox dens or other refugia in and surrounding work stations. The survey for potential kit fox dens would be performed by a qualified biologist 14-30 days prior to the commencement of construction activities. All identified potential dens would be monitored for evidence of kit fox use by placing tracking material at den entrances and monitoring for at least three consecutive nights. If no activity is detected at these dens, they may be closed (with prior concurrence from the USFWS). Alternatively, fencing may be used to establish construction exclusion zones, with concurrence from USFWS.
- If kit fox occupancy is determined at a given site, closure activities would immediately be halted and the USFWS would be contacted. Depending on the den type, reasonable and prudent measures to avoid effects to kit fox may include seasonal limitations on project construction at the site (i.e., restricting the construction period to avoid spring-summer pupping season), or establishing a construction exclusion zone around the identified site, or resurveying the den following a brief (i.e., 7 days) period to determine species presence or absence.
- During project construction, project-related vehicles would observe a maximum 20-mile-per-hour speed limit on private roads in kit fox habitat to minimize the possibility for inadvertent kit fox mortality. Off-road construction traffic outside the designated construction area would be prohibited in areas that provide kit fox habitat.
- To prevent accidental entrapment of kit fox or other animals during construction, all excavated holes or trenches greater than 2 feet deep would be covered at the end of each work day with suitable materials, or escape routes would be constructed of earthen materials or wooden planks. Before such holes are filled, they shall be thoroughly inspected for trapped animals.
- All food-related trash items such as wrappers, cans, bottles, and food scraps would be disposed of in closed containers and removed from the project site.
- To prevent kit fox harassment, mortality, or destruction of dens, no pets would be allowed with construction personnel on the project site.
- Although not currently proposed, in the event that limited nighttime construction is required, all construction activities will conform to the above measures and will be actively monitored to minimize potential effects to kit fox.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. DWR's Environmental Consultant will conduct pre-construction surveys to identify potential kit fox dens.	1. Sign-off on inspection report and/or MMRP.	1. DWR	1. Prior to construction	1.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
2. If kit fox occupancy is determined, DWR's Environmental Consultant will implement measures to avoid kit fox disturbance.	2. Sign-off on inspection report and/or MMRP.	2. DWR	2. Prior to construction	2.
3. Prepare Contract Specifications that require the contractor to follow the measures to protect San Joaquin kit fox.	3. Final review and approval of design plans and specifications.	3. DWR	3. During design	3.
4. Monitor construction activities to verify that measures are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	4. Sign-off on inspection report and/or MMRP.	4. DWR	4. During construction	4.

Measure 3.3-3b: To compensate for temporary and permanent losses to San Joaquin kit fox habitat, DWR will provide compensatory mitigation at a ratio of 1.1:1 for temporary and 3:1 for permanent losses. Provision of compensatory mitigation may be provided through one, or a combination of, the following mechanisms:

- Establishment of conservation easement on lands currently owned by DWR adjoining Bethany Reservoir.
- Participation in an approved mitigation bank program;
- Establishment of conservation easement or purchase of private lands to be set aside as managed kit fox habitat.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Provide compensatory mitigation for temporary and permanent losses to San Joaquin kit fox habitat.	1. Recordation of conservation easement and/or participation in mitigation bank.	1. DWR	1. Post-construction	1.

Impact 3.3-4: Construction of the Proposed Project would result in the temporary and permanent loss of potential aquatic and breeding habitat for California red-legged frog and California tiger salamander.

Measure 3.3-4a: Measures to minimize and avoid California red-legged frog and California tiger salamander habitat. Measures to minimize and avoid “take” of CRLF would be implemented for the project. These measures shall also provide protection for CTS. These measures are derived from the Programmatic Biological Opinion (PBO) for impacts to CRLF. This project will not likely be covered under the PBO. However, the PBO summarizes typical project effects that

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could occur as a result of the proposed action and provides generic preventive measures that will substantially reduce the risk of incidental “take” of CRLF. Prior to and during construction, the following actions will be performed to minimize adverse effects to CRLF and CTS:

- The name and credentials of a biologist qualified to act as construction monitor will be submitted to USFWS for approval at least 15 days prior to commencement of work.
- A USFWS-approved biologist shall survey the work sites two weeks before the onset of construction activities. If California red-legged frog, tadpoles, or eggs are found, the approved biologist shall contact USFWS to determine if moving any of these life-stages is appropriate. If USFWS approves moving the animals, the approved biologist shall be allowed sufficient time to move frogs from the work sites before work activities begin. If California red-legged frog are not identified, construction may proceed at these sites.
- All work activities within or adjacent to potential CRLF aquatic habitat shall be completed between May 1 and November 1.
- Exclusionary fencing (i.e. silt fences) shall be installed around all construction areas that are within 100 feet of or adjacent to potential California red-legged frog habitat.
- A USFWS–approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the California red-legged frog and its habitat, the importance of the California red-legged frog and its habitat, the general measures that are being implemented to conserve California red-legged frog as they relate to the project, and the boundaries within which the project may be accomplished.
- A USFWS-approved biologist shall be present at active work sites until such time that the removal of California red-legged frog, instruction of workers, and habitat disturbance have been completed. After this time, the contractor or permittee shall designate a person to monitor on-site compliance with all minimization measures. The USFWS-approved biologist shall ensure that this individual receives training outlined in the PBO.
- During work activities, all trash that may attract predators shall be properly contained, removed from the work site and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.
- Staging areas shall be situated at least 60 feet from any riparian habitat or water body. All fueling and maintenance of vehicles and other equipment shall occur at least 60 feet from any riparian habitat or water body. The USACOE and permittee shall ensure contamination of habitat does not occur during such operations. Prior to the onset of work, the USACOE shall ensure that the permittee has prepared a plan to allow a prompt and effective response to any accidental spills.

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- Project sites shall be revegetated with an appropriate assemblage of native upland vegetation, and if necessary, riparian and wetland vegetation, suitable for the area. A plan describing pre-project conditions and restoration and monitoring success criteria will be prepared prior to construction.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Submit name and credentials of a qualified biologist acting as construction monitor.	1. Sign-off on inspection report and/or MMRP.	1. DWR	1. Prior to construction	1.
2. A USFWS-approved biologist shall survey work sites for California red-legged frog two weeks before the commencement of construction activities.	2. Sign-off on inspection report and/or MMRP.	2. DWR	2. Prior to construction	2.
3. The USFWS-approved biologist shall conduct training sessions for construction personnel and be present at work sites during the phases of construction when California red-legged frog may be threatened.	3. Sign-off on inspection report and/or MMRP.	3. DWR	3.	3.
4. Prepare Contract Specifications that require the contractor to follow the measures to protect California red-legged frog and California tiger salamander.	4. Final review and approval of design plans and specifications.	4. DWR	4. During design	4.
5. DWR's Environmental Consultant shall submit a Revegetation Plan describing pre-project conditions, and restoration and monitoring success criteria.	5. Approval of Revegetation Plan.	5. DWR	5. Prior to construction	5.
6. DWR's Environmental Consultant shall revegetate project sites in accordance with Revegetation Plan.	6. Sign-off on inspection report and/or MMRP.	6. DWR	6. Post-construction	6.
7. Monitor construction activities to verify that measures are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	7. Sign-off on inspection report and/or MMRP.	7. DWR	7. During construction and post-construction	7.

Measure 3.3-4b: Consultation with USFWS. Facilities that are located within occupied or suspected CRLF and CTS habitat, shall be subject to formal Section 7 consultation under the Endangered Species Act. Consultation with USFWS would likely establish additional reasonable and prudent measures to avoid CRLF and CTS take and require mitigation for temporary and permanent impacts to CRLF habitat. These measures will be in addition to those minimization measures implemented under **Measure 3.3-4a**.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Initiate formal Section 7 consultation with USFWS.	1. Biological Opinion and incidental take statement issued by USFWS.	1. DWR	1. Prior to construction	1.
2. Prepare Contract Specifications for Environmental Consultant and Contractor to incorporate conditions of Biological Opinion.	2. Final review and approval of design plans and specifications.	2. DWR	2. Prior to construction	2.
3. Monitor construction activities to verify that conditions are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	3. Sign-off on inspection reports and/or MMRP.	3. DWR	3. During construction	3.

Measure 3.3-4c: DWR shall provide compensation for the temporary disruption (1.1:1 ratio) and permanent loss of CRLF and CTS habitat (3:1 ratio), or similar ratios approved by CDFG and USFWS through one, or a combination of, the following mechanisms:

- Establishment of conservation easement on lands currently owned by DWR adjoining Bethany Reservoir.
- Participation in an approved mitigation bank program;
- Establishment of conservation easement or purchase of private lands to be set aside as managed CRLF & CTS habitat.
- Enhancement and revegetation along the SBA project corridor. This may include enhancement of Brushy Creek along the construction area (approximately 3,000 linear feet) to provide suitable aquatic breeding habitat for CRLF. Methods of enhancement and restoration may include, but are not limited to: reducing erosion, installing breeding ponds, excluding cattle, and other measures to increase water quality within the reach.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Provide compensatory mitigation for temporary and permanent losses to California red-legged frog and California tiger salamander habitat.	1. Recordation of conservation easement, participation in mitigation bank, and/or enhancement and restoration.	1. DWR	1. Post-construction	1.

Impact 3.3-5: Construction of the Proposed Project would result in the temporary and permanent loss of habitat capable of supporting listed vernal pool invertebrates, including Longhorn fairy shrimp and Vernal pool fairy shrimp.

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Measure 3.3-5a: Complete Seasonal Surveys. Surveys shall be completed for 2004 dry season and 2004/05 wet season to complete the USFWS survey protocol. If results are negative, no additional mitigation measures are required.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. DWR's Environmental Consultant shall complete surveys for Longhorn fairy shrimp and Vernal pool fairy shrimp for the 2004 dry season and 2004/05 wet season.	1. Sign-off on inspection reports and/or MMRP.	1. DWR	1. Prior to construction	1.

Measure 3.3-5b: Agency Consultation. If vernal pool invertebrates are found within the SBA project corridor, consultation with USFWS will be required. DWR shall provide compensation for the permanent loss of vernal pool habitat at a 3:1 ratio, or similar ratio approved by CDFG and USFWS through one, or a combination of, the following mechanisms:

- Establishment of conservation easement on lands currently owned by DWR adjoining Bethany Reservoir.
- Participation in an approved mitigation bank program;
- Establishment of conservation easement or purchase of private lands to be set aside as managed vernal pool habitat.
- Enhancement and revegetation along the SBA project corridor

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Initiate formal Section 7 consultation with USFWS, if necessary.	1. Biological Opinion and incidental take statement issued by USFWS.	1. DWR	1. Prior to construction	1.
2. Prepare Contract Specifications for Environmental Consultant and Contractor to incorporate conditions of Biological Opinion.	2. Final review and approval of design plans and specifications.	2. DWR	2. Prior to construction	2.
3. Monitor construction activities to verify that conditions are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	3. Sign-off on inspection reports and/or MMRP.	3. DWR	3. During construction	3.

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Impact 3.3-6: Construction of the Proposed Project would result in the temporary and permanent loss of occupied habitat for burrowing owl.

Measure 3.3-6a: Preconstruction surveys for burrowing owls shall be conducted by a qualified biologist 14-30 days prior to the start of construction according to current CDFG protocol. Surveys shall cover grassland areas within 250 feet of individual facility construction areas (SBPP, Brushy Creek Pipeline, and Dyer Reservoir). Surveys along canals will be limited to DWR right-of-way, due to the limited nature of construction and availability of access. If owls are detected during surveys, occupied burrows will not be disturbed.

The proposed Dyer Reservoir site is a significant breeding location for burrowing owl. The following measures to avoid, minimize, or mitigate impacts to burrowing owls would be incorporated into the project. If other areas of the SBA project corridor are occupied by burrowing owls, the following measures would apply as well:

- Construction exclusion areas would be established around the occupied burrows in which no disturbance would be allowed to occur. During the non-breeding season (September 1 through January 31), the exclusion zone would extend 160 feet around occupied burrows. During the breeding season (February 1 through August 31), exclusion areas would extend 250 feet around occupied burrows.
- If the above requirements cannot be met, passive relocation of on-site owls may be implemented as an alternative, but only during the non-breeding season and only with CDFG approval. Passive relocation would be accomplished by installing one-way doors on the entrances of burrows located within 160 feet of the project site. The one-way doors would be left in place for 48-hours to ensure the owls have left the burrow. The burrows would then be excavated with a qualified biologist present.
- Burrows within the construction area would be excavated using hand tools, and then refilled to prevent reoccupation. If any burrowing owls are discovered during excavation, excavation would cease and the owl would be allowed to escape. Excavation may be completed when the biological monitor confirms the burrow is empty.
- For each burrow excavated by project construction, two alternative unoccupied natural or artificial burrows would be provided outside the 160-foot buffer zone. The alternate burrows would be monitored daily for seven days to confirm that the owls have moved and acclimated.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Prepare Contract Specifications that require the contractor to follow the measures to protect burrowing owl habitat.	1. Final review and approval of design plans and specifications.	1. DWR	1. During design	1.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
2. Monitor construction activities to verify that measures are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	2. Sign-off on inspection report and/or MMRP.	2. DWR	2. During construction and post-construction	2.

Measure 3.3-6b: To compensate for permanent loss of burrowing owl habitat from the Proposed Project (SBPP – 7.5 acres; Brushy Creek Pipeline – 0.67 acres; Dyer Reservoir – 27 acres), DWR will compensate this loss at a minimum ratio of 3:1 or similar ratio deemed appropriate by CDFG.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Provide compensatory mitigation for permanent losses to burrowing owl habitat.	1. Recordation of conservation easement and/or participation in mitigation bank.	1. DWR	1. Post-construction	1.

Measure 3.3-6c: Temporary losses of burrowing owl habitat will be mitigated by site restoration, and where required, by installation of artificial burrows (see **Measure 3.3-6a**). Given the regional importance of the burrowing owl colony at Dyer Reservoir, artificial burrows will be established at a ratio of 3:1 for all burrows occupied at the time of construction disturbance or as recorded in the 2004 survey, whichever is higher. Artificial burrows will be established through one of the following mechanisms:

- Once construction of Dyer Reservoir is completed, artificial burrows will be established on the spoil site east of the proposed reservoir.
- Installation of a similar number of artificial burrows at the conservation easement established to mitigate for San Joaquin kit fox habitat (see **Measure 3.3-3b**).
- Participation in a USFWS-approved mitigation bank providing offset mitigation credits for loss of burrowing owl habitat.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Provide compensatory mitigation for temporary losses to burrowing owl habitat.	1. Installation of artificial burrows and/or participation in mitigation bank.	1. DWR	1. Post-construction	1.

Impact 3.3-7: Construction of the Proposed Project would result in temporary construction disturbance to pond turtle habitat.

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Measure 3.3-7a: Prior to the start of construction activities, a qualified biologist shall perform pond turtle surveys within Brushy Creek and in other ponded areas affected by the Proposed Project. Surveys may include a search for nests as well as individual turtles. The qualified biologist will be responsible for the survey and for the relocation of adult turtles. Construction will not proceed until the SBA project corridor can be deemed free of turtles and nests. If nests are observed, a biologist with the appropriate permits from CDFG, may move the eggs to a suitable facility for incubation, and release hatchlings into the creek system in the following fall.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
<ol style="list-style-type: none"> 1. DWR’s Environmental Consultant shall perform pond turtle surveys within Brushy Creek and in other ponded areas affected by the Proposed Project and relocate adult turtles. 2. If nests are observed, obtain permits from CDFG to move the eggs to a suitable facility for incubation, and release hatchlings into the creek system in the following fall. 	<ol style="list-style-type: none"> 1. Sign-off on inspection report and/or MMRP. 2. Permit issuance from CDFG. 	<ol style="list-style-type: none"> 1. DWR 2. DWR and CDFG 	<ol style="list-style-type: none"> 1. Prior to construction 2. During construction 	<ol style="list-style-type: none"> 1. 2.

Impact 3.3-8: Construction of the Proposed Project would result in disturbance to nesting habitat for breeding raptors and passerine birds.

Measure 3.3-8a: Protection to nesting and breeding birds and raptors. The following mitigation measures will be implemented to address potential impacts to nesting and breeding birds and raptors in the vicinity of the construction sites:

- To the extent feasible, construction activities shall avoid the nesting season between March 15 and August 15. If construction must occur during this period, all sites shall be surveyed prior to construction by a qualified biologist to verify the presence or absence of nesting birds or raptors. If the survey indicates the potential presence of nesting birds or raptors, the results would be coordinated with CDFG and suitable avoidance measures would be developed and implemented. Construction shall observe the CDFG avoidance guidelines which require a minimum 500-foot buffer zone surrounding active raptor nests and a 250-foot buffer zone surrounding nests of other birds. Buffer zones shall remain until young have fledged.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. If construction occurs during the breeding season, DWR's Environmental Consultant shall survey for nests of raptors and other birds.	1. Sign-off on inspection report and/or MMRP.	1. DWR	1. Prior to construction	1.
2. Prepare Contract Specifications that require the contractor follow the measures to protect nesting special-status raptors and other nesting birds, if construction is to occur during the breeding season.	2. Final review and approval of design plans and specifications.	2. DWR	2. During design	2.
3. Monitor construction activities to verify that measures are implemented if construction occurs during the breeding season. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	3. Sign-off on inspection report and/or MMRP.	3. DWR	3. During construction	3.

Measure 3.3-8b: Construction activities within 500 feet of MP 8.60 along Livermore Canal in the vicinity of the known golden eagle nest and tricolored blackbird nesting colony, will be avoided during these species nesting and breeding periods. The nesting period for golden eagle is between February and April. The nesting period for tricolored blackbirds is between April and July. Nest activity will be confirmed by site monitoring prior to construction.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. DWR's Environmental Consultant shall confirm golden eagle and tricolored blackbird nest activity.	1. Sign-off on inspection report and/or MMRP.	1. DWR	1. Prior to construction	1.
2. Incorporate requirement that construction activities within 500 feet of MP 8.60 along Livermore Canal in the vicinity of the known golden eagle nest and tricolored blackbird nesting colony (if occupied), will be avoided during these species nesting and breeding periods, in Contract Specifications.	2. Final review and approval of design plans and specifications.	2. DWR	2. During design	2.
3. Monitor construction activities to verify that measures are implemented if construction occurs during the breeding season. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	3. Sign-off on inspection report and/or MMRP.	3. DWR	3. During construction	3.

Impact 3.3-9: Construction of the Proposed Project could result in impacts to heritage or other significant trees within the SBA project corridor.

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Measure 3.3-9a: DWR shall conduct a tree survey along the SBA project corridor and avoid removal or damage to protected trees. If complete avoidance is infeasible, implement **Measures 3.3-8a and 3.3-8b**. This measure applies to those project components that occur within the County of Alameda right-of-way.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. DWR's Environmental Consultant will conduct a tree survey along the SBA project corridor and avoid removal or damage to protected trees.	1. Sign-off on inspection report and/or MMRP.	1. DWR	1. Prior to construction	1.
2. Prepare Contract Specifications that require contractor to mark an exclusionary zone (with plastic fencing) to avoid removal or damage to protected trees.	2. Final review and approval of design plans and specifications.	2. DWR	2. During design	2.
3. Monitor construction activities to verify that measures are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	3. Sign-off on inspection report and/or MMRP.	3. DWR	3. During construction	3.

Measure 3.3-9b: If tree removal is required, a permit from the County of Alameda Public Works Department shall be obtained, and mitigation developed in coordination with the County. Mitigation may be required and could include replacing disturbed or removed trees or compensating the County for the appraised value of the impacted trees. Trees will be replanted at the same location following construction with appropriate setback from pipeline. Maintenance of the replanted trees until established may be required by the County to ensure survival.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. If tree removal required, obtain permit from Alameda County Public Works.	1. Permit granted to DWR by Alameda County.	1. DWR	1. Prior to construction	1.
2. Incorporate permit conditions into Contract Specifications.	2. Final review and approval of design plans and specifications.	2. DWR	2. Prior to construction	2.
3. Monitor construction activities to verify that permit conditions are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	3. Sign-off on inspection report and/or MMRP.	3. DWR	3. During construction	3.

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Impact 3.3-10: Construction of the Proposed Project could result in impacts to common plant and animal species.

Measure 3.3-10a: For construction at all facilities, one of the following shall be implemented: cover all open trench areas at the end of work days; provide escape ramps; or have the biological monitor check trenches daily.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Prepare Contract Specifications that require the contractor to implement one of the following during construction of all facilities: cover all open trench areas at the end of work days; provide escape ramps; or have the biological monitor check trenches daily.	1. Final review and approval of design plans and specifications.	1. DWR	1. During design	1.
2. Monitor construction activities to verify that measures are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	2. Sign-off on inspection report and/or MMRP.	2. DWR	2. During construction	2.

LAND USE, PLANNING AND RECREATION

Impact 3.4-1: Project construction would result in short-term disturbance to some adjacent land uses along the project construction corridor.

Measure 3.4-1a: DWR shall require its contractor to prepare a Traffic Control Plan specifying measures for maintaining access to residences along the construction route, including Dyer Road (see **Section 3.8, Traffic and Circulation**).

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Review the traffic safety / traffic management plan to ensure compliance with Measure 3.4-1a. Notify DWR and DWR's consulting traffic engineer if any modifications are required. Review contract specifications for the construction contractor to ensure that measures contained in the traffic safety / traffic management plan are included.	1. Monitor construction activities to verify compliance with the traffic safety / traffic management plan. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	1. DWR	1. During construction	1.

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Measure 3.4-1b: DWR shall coordinate access to wind turbine facilities with operators, and shall include provisions to maintain access or provide alternative access to wind turbine facilities during construction (see **Section 3.8, Traffic and Circulation**).

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Acquire rights to access wind facilities area and maintain access to facilities during construction.	1. Obtain easements and entry permits required for construction.	1. DWR	1. During design	1.
2. Incorporate provisions allowing access to facilities into specifications.	2. Final review and approval of design plans and specifications.	2. DWR	2. During development of specifications	2.

Additional mitigation measures for construction disturbance to residential receptors are identified in **Sections 3.6, Air Quality** and **3.7, Noise**.

Impact 3.4-2: Project construction could result in long-term effects to existing and planned land uses in the vicinity of proposed facilities. Less than Significant with Mitigation.

Measure 3.4-2a: DWR shall negotiate with wind turbine operators to provide replacement compensation for the loss of one turbine along the Stage 3 Brushy Creek Pipeline. This negotiation shall occur concurrently with permanent right-of-way acquisition for the pipeline route.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Negotiate with wind turbine operators to provide replacement compensation mitigation for loss of one turbine along the Stage 3 Brushy Creek Pipeline.	1. Finalize compensation agreement prior to construction.	1. DWR	1. Prior to construction	1.

Measure 3.4-2b: DWR shall negotiate with Waste Management of Alameda County (WMAC) to ensure that easement acquisition does not preclude WMAC from meeting its mitigation obligation as identified in C-5512 and subsequent regulatory permits. This may include identification of appropriate lands to offset open space acreage permanently removed from conservation, estimated at 27 acres.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Negotiate with WMAC to reach an agreement allowing WMAC to meet its mitigation obligations under C-5512 and allowing DWR's easement acquisition.	1. Finalize agreement with WMAC.	1. DWR	1. Prior to construction	1.
2. Implement agreement through identification of methods to offset loss of conservation lands if necessary and incorporate into specifications.	2. Final review and approval of design plans and specifications.	2. DWR	2. Prior to construction	2.

Impact 3.4-3: Project construction could result in short-term and long-term disturbance of recreational facility uses.

Measure 3.4-3a: Implement **Measure 3.4-1a**.

Impact 3.4-4: Implementation of the Proposed Project could result in the disturbance of land designated by the Department of Conservation FMMP as Farmland of Statewide Importance, Grazing Land and lands under the Williamson Act contract.

Measure 3.4-4: Implement provisions in Article 6 of the Williamson Act (Government Code Sections 51290-51295, as amended by Senate Bill 1534 in 1994) regarding acquisition of contracted land for public use. Specific provisions define procedures that DWR must follow in notifying the Director of the Department of Conservation, conditions under which a public improvement may not be located within an agricultural preserve, and public improvements which are exempt from these conditions.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Notification of the Department of Conservation regarding acquisition of contracted land for public use.	1. Incorporate any comments received when notifying the Department of Conservation.	1. DWR	1. Prior to construction	1.
2. Adhere to the provisions for conditions under which a public improvement may not be located within an agricultural preserve including applicable exemptions and incorporate into specifications.	2. Final review and approval of design plans and specifications.	2. DWR	2. Prior to construction	2.

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Impact 3.4-5: In the event that a conservation easement is established at Bethany Reservoir for biological resource mitigation, implementation of a conservation easement could have secondary effects to recreational uses associated with limiting potential future recreational uses at Bethany Reservoir within the conservation easement area.

Measure 3.4-5a: Establishment of biological resource conservation easements at Bethany Reservoir shall include provisions to allow for passive or guided recreational access, as appropriate within the context of the conservation easement goals. DWR shall coordinate with California Department of Parks and Recreation with respect to establishment of conservation easements at Bethany Reservoir.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Coordinate with Department of Parks & Recreation during establishment of Bethany Reservoir conservation easement.	1. Incorporate results of coordination with Department of Parks & Recreation into specifications.	1. DWR	1. Prior to construction	1.

CULTURAL RESOURCES

Impact 3.5-1: Construction of proposed facilities would have the potential to impact known archaeological resources.

Measure 3.5-1a: Known prehistoric and historic archaeological sites located within, or just outside of the project APE, should be designated as Environmentally Sensitive Areas. Construction personnel and equipment will be instructed on avoidance of Environmentally Sensitive Areas.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. A qualified archaeologist will assist in the final pipeline alignment in the vicinity of known cultural resources.	1. Final review and approval of design plans and specifications.	1. DWR	1. During design	1.
2. Prepare data recovery program (if known cultural resources cannot be avoided).	2. Approve data recovery program.	2. DWR	2. During design	2.
3. Implement data recovery program, if necessary.	3. Sign-off on research and field investigations.	3. DWR	3. Prior to construction	3.

Measure 3.5-1b: All construction personnel shall be trained regarding the recognition of possible buried cultural remains, including prehistoric and historic resources during construction, prior to the initiation of construction or ground-disturbing activities. DWR shall complete training for all construction personnel.

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Training shall inform all construction personnel of the procedures to be followed upon the discovery of archaeological materials, including Native American burials. The following issues shall be addressed in training or in preparation for construction:

- Any subsurface disturbance shall require the education of construction personnel regarding the potential for inadvertent exposure of buried archaeological deposits.
- DWR shall provide a background briefing for supervisory construction personnel describing the potential for exposing cultural resources, the location of any potential Environmentally Sensitive Areas and anticipated procedures to treat unexpected discoveries.
- Upon discovery of potential buried cultural materials, work in the immediate area of the find shall be halted and a qualified archaeologist notified. Once the find has been identified, the archaeologist will make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are found to be significant according to CEQA.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. A qualified archaeologist will conduct training sessions regarding archaeological resources.	1. Review and sign-off on training materials	1. DWR	1. Prior to construction	1.
2. Monitor construction activities to verify that Cultural Resources Management Plan measures are implemented. In non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	2. Sign-off on inspection report and/or MMRP.	2. DWR	2. During construction	2.

Measure 3.5-1c: DWR shall develop a Cultural Resources Management Plan that includes procedures for the protection and avoidance of sensitive areas and Archaeological High-Probability Areas; evaluation and treatment of the unexpected discovery of cultural resources including Native American burials; detailed reporting requirements by the Project archaeologist; curation of any cultural materials collected during the Project; and requirements that archaeologists and other discipline specialists meet the Professional Qualifications Standards mandated by the California Office of Historic Preservation. Specific protective measures shall be defined in the Cultural Resources Management Plan to reduce the potential adverse impacts on any presently undetected cultural resources to a less-than-significant level.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Develop Cultural Resources Management Plan.	1. Final approval of Cultural Resources Management Plan.	1. DWR	1. During design	1.
2. Incorporate Cultural Resources Management Plan into Contract Specifications.	2. Final review and approval of design plans and specifications.	2. DWR	2. During development of specifications	2.
3. Monitor construction activities to verify that Cultural Resources Management Plan measures are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	3. Sign-off on inspection report and/or MMRP.	3. DWR	3. During construction	3.

Measure 3.5-1d: The Cultural Resources Management Plan shall define construction procedures for areas near known/recorded cultural sites. Wherever trenches, access roads, equipment, etc., must be placed or accessed within 100 feet of a recorded, reported, or known archaeological site eligible or potentially eligible for the California Register of Historic Resources, the site will be flagged on the ground as an Environmentally Sensitive Area (without disclosure of the exact nature of the environmental sensitivity). Archaeological monitoring of Project construction will be focused in the immediate vicinity of the designated Environmentally Sensitive Areas.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Develop Cultural Resources Management Plan.	1. Final approval of Cultural Resources Management Plan.	1. DWR	1. During design	1.
2. Incorporate Cultural Resources Management Plan into Contract Specifications.	2. Final review and approval of design plans and specifications.	2. DWR	2. During development of specifications	2.
3. Monitor construction activities to verify that Cultural Resources Management Plan measures are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	3. Sign-off on inspection report and/or MMRP.	3. DWR	3. During construction	3.

Measure 3.5-1e: Archaeological monitoring shall be conducted by a qualified archaeologist familiar with the types of historic and prehistoric resources that could be encountered along the pipeline corridor. Monitoring shall occur in all locations specified below or at the discretion of the principle archaeologist. The qualifications of the principle archaeologist shall be approved by DWR. Monitored locations will include the Archaeological High-Probability Areas along Brushy Creek.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. A qualified archaeologist shall survey all sites along pipeline corridor, including the Archaeological High-Probability Areas along Brushy Creek.	1. Sign-off on survey report.	1. DWR	1. During design	1.
2. Prepare data recovery program (if known cultural resources cannot be avoided).	2. Approve data recovery program.	2. DWR	2. During design	2.
3. Implement data recovery program, if necessary.	3. Sign-off on research and field investigations.	3. DWR	3. Prior to construction	

Measure 3.5-1f: Should unanticipated finds be uncovered during construction, work in the immediate vicinity must cease until an archaeologist is informed and an assessment of the historic or prehistoric resources is conducted. In the event that Native American human remains or funerary objects are discovered, the provisions of the California Health and Safety Code should be followed. Section 7050.5(b) of the California Health and Safety Code should be implemented in the event that human remains or possible human remains are located.

The County Coroner, upon recognizing the remains as being of Native American origin, is responsible to contact the Native American Heritage Commission within 24 hours. The Commission has various powers and duties to provide for the ultimate disposition of any Native American remains, as does the assigned Most Likely Descendant. Sections 5097.98 and 5097.99 of the Public Resources Code also call for “protection to Native American human burials and skeletal remains from vandalism and inadvertent destruction.” A combination of preconstruction worker training and intermittent construction monitoring by a qualified archaeologist, will achieve compliance with this requirement regarding protection of human remains. Workers will be trained regarding the potential for discovery of cultural or human remains, and both the need for proper and timely reporting of such finds, and the consequences of failure thereof.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Incorporate into the Contract Specifications that in the event of discovery of unanticipated finds during construction, work in the immediate vicinity will cease while an assessment of the historic or prehistoric resources is conducted by an archaeologist.	1. Completion of resource assessment.	1. DWR	1. During construction	1.
2. In the event that Native American human remains or funerary objects are discovered, the provisions of the California Health and Safety Code should be followed and the Native American Heritage Commission will be contacted.	2. Receipt of response from the Native American Heritage Commission.	2. DWR	2. During construction	2.

AIR QUALITY

Impact 3.6-1: Construction and demolition activities associated with facility construction would generate short-term emissions of criteria pollutants, including suspended and inhalable particulate matter and equipment exhaust emissions.

Measure 3.6-1: DWR shall require the contractor to prepare and implement a Dust Abatement Program to minimize fugitive dust generation. At a minimum, contractor(s) shall include the following measures as applicable¹:

BAAQMD Basic Control Measures

- Water all active construction sites at least twice daily, and more often on days when winds exceed 10 to 15 miles per hour (mph).
- Cover all trucks hauling soil, sand, and other loose materials *or* require all trucks to maintain at least 2 feet of freeboard.
- Pave, apply water three times daily, or apply non-toxic chemical soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.
- Sweep daily with water sweepers all paved access roads, parking areas, and staging areas at construction sites.

¹ Control measures for construction emissions of PM10 were selected from BAAQMD's *CEQA Guidelines for Assessing the Air Quality Impact of Projects and Plans*.

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- Sweep streets daily with water sweepers if visible soil material is carried onto adjacent public streets.
- Enclose, cover, water twice daily, or apply non-toxic chemical soil binders to exposed stockpiles (dirt, sand, etc.).
- Limit the speed of all construction vehicles to 15 mph while on unpaved roads at the project site.

In addition to the Basic Control Measures, the following measures, as applicable, will be implemented because the construction site is greater than 4 acres in area and is located near sensitive receptors:

- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
- Enclose, cover, water twice daily or apply (non-toxic) chemical soil stabilizers to exposed stockpiles (dirt, sand, etc.).
- Limit traffic speeds on unpaved roads to 15 mph.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.
- Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving a construction site.
- Install wind breaks, or plant trees/vegetative wind breaks at windward side(s) of construction areas.
- When winds (instantaneous gusts) exceed 25 mph, watering will need to occur more frequently.
- Limit the area subject to excavation, grading, and other construction activity at any one time.
- Pave all roadways, driveways, sidewalks, etc. as soon as practical. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Designate a person or persons to monitor the dust control program and order increased watering, as necessary, to prevent transport of dust offsite. The name and telephone number of such persons shall be provided to the BAAQMD prior to the start of construction.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
<ol style="list-style-type: none"> 1. Require the contractor to prepare a dust abatement program that meets BAAQMD recommendations. 2. Monitor construction activities to verify that measures are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance. 	<ol style="list-style-type: none"> 1. Include requirement in contractor specification. Review and approve dust abatement program. 2. Sign-off on inspection report and/or MMRP. 	<ol style="list-style-type: none"> 1. DWR 2. DWR 	<ol style="list-style-type: none"> 1. During development of specifications 2. During construction 	<ol style="list-style-type: none"> 1. 2.

Impact 3.6-2: Operation of Proposed Project components would result in operational air emissions from powering of pumps, testing and potential use of emergency generators, and from increased employee trips. Emissions from these sources would not be substantial and would not exceed significance criteria of the BAAQMD.

No Mitigation Required.

Impact 3.6-3: Project operation could result in operational odor emissions.

No Mitigation Required.

NOISE AND VIBRATION

Impact 3.7-1: Construction activities would intermittently and temporarily generate noise levels above existing ambient levels in the project vicinity.

Measure 3.7-1a: For Brushy Creek Pipeline along Dyer Canal (Sta 172+00 to Sta 197+00), Dyer Reservoir, and Canal Improvements, construction contractors shall adhere to the Alameda County General Code, Title 6 Health & Safety, Chapter 6.60 Noise, Sections 6.60.070(E) and 6.60.070(G):

- Construction hours shall be limited to between the hours of 7:00 a.m. and 7:00 p.m. on weekdays and 8:00 a.m. and 5:00 p.m. on Saturdays and Sundays; and
- All equipment used on the project shall be muffled and maintained in good operating condition. All internal combustion engine-driven equipment shall be fitted with intake and exhaust mufflers which are in good condition.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Incorporate noise control methods into Contract Specifications.	1. Final review and approval of design plans and specifications.	1. DWR	1. During development of specifications	1.
2. Monitor construction activities to verify that measures are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	2. Sign-off on inspection report and/or MMRP.	2. DWR	2. During construction	2.

Measure 3.7-1b: Construction contractors shall locate fixed construction equipment such as compressors as far as possible from noise-sensitive receptors during construction.

With mitigation, construction activities would still increase ambient noise levels along the project corridors. However, mitigation would reduce the increase in noise due to construction and would reduce the chance of exposing people to substantial noise levels. Because of the limited and non-permanent duration of the impact, the residual impact would be less than significant.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Incorporate noise control methods into Contract Specifications.	1. Final review and approval of design plans and specifications.	1. DWR	1. During development of specifications	1.
2. Monitor construction activities to verify that measures are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	2. Sign-off on inspection report and/or MMRP.	2. DWR	2. During construction	2.

Impact 3.7-2: Construction truck traffic would generate noise levels above existing ambient levels along haul routes used to transport excavated materials.

Measure 3.7-2: Implement **Measure 3.7-1a**.

Impact 3.7-3: Operational activities would generate noise levels above existing ambient levels in the project vicinity.

No Mitigation Required.

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Impact 3.7-4: Construction activities such as shoring, grading, excavation and controlled detonation could result in vibration impacts which could affect adjacent structures and create human annoyance.

Measure 3.7-4. In the event that controlled detonation is required in order to effectively remove bedrock, DWR shall require contractors to comply with Bureau of Mines criteria of 2.0 in/s (high frequency >40 Hz) or 0.5 in/s (low frequency <40 Hz), or more stringent criteria as applicable for individual facilities.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Prepare Contract Specifications for the construction contractor that require the use of mechanized equipment as much as possible, and identify the time restrictions of controlled detonation. 2. Monitor construction activities to verify that measures are implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	1. Monitor construction activities to verify the use of mechanized equipment as much as possible, and the occurrence of controlled detonation within the allowable time periods. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance. 2. Sign-off on inspection report and/or MMRP.	1. DWR 2. DWR	1. During development of specifications 2. During construction	1. 2.

TRAFFIC AND CIRCULATION

Impact 3.8-1: Construction activities would intermittently and temporarily generate increases in vehicle trips by construction workers and construction vehicles on area roadways and would require single lane closures on major roadways.

Measure 3.8-1a: DWR shall obtain the necessary road encroachment permits prior to construction and will comply with the applicable conditions of approval. Road encroachment permits may be necessary on the following roadways: Patterson Pass Road, Tesla Road and Mines Road.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Obtain road encroachment permits from Alameda County.	1. Permit granted to DWR by Alameda County.	1. DWR	1. Prior to construction	1.
2. Incorporate permit conditions into Contract Specifications.	2. Final review and approval of design plans and specifications.	2. DWR	2. Prior to construction	2.
3. Alameda County inspections	3. Sign-off from Alameda County.	3. DWR	3. During construction	3.

Measure 3.8-1b: DWR will require the contractor to prepare a Traffic Control Plan in accordance with professional engineering standards prior to construction. The Traffic Control Plan could include the following requirements:

- DWR shall post advanced warning of construction activities to allow motorists to select alternative routes in advance.
- DWR shall arrange for a telephone resource to address public questions and complaints during project construction.
- DWR shall comply with roadside safety protocols, so as to reduce the risk of accident.
- For roadways requiring single lane closures, DWR (and the construction contractor) shall maintain alternate one-way traffic flow and utilize flagger-controls.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. DWR will prepare a detour plan and incorporate it into the plans and specifications	1. Approval of detour plan and review and approval of the design plans and specifications.	1. DWR	1. During development of plans and specifications.	1.
2. Traffic Control Plan prepared by a licensed traffic engineer	2. Approval of the Traffic Control Plan.	2. DWR	2. Prior to construction	2.
3. Construction inspection to ensure compliance with Traffic Control Plan.	3. Sign-off on inspection report and/or MMRP	3. DWR	3. During construction	3.

Measure 3.8-1c: During periods when Dyer Road is used by project construction trucks, DWR shall install warning signs (in compliance with County permit conditions) on Altamont Pass Road in advance of the Dyer Road intersection to alert drivers of slow-moving trucks turning onto Altamont Pass Road.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Incorporate into Contract Specifications, the requirement that warning signs will be installed on Altamont Pass Road in advance of the Dyer Road intersection during periods when Dyer Road is used by project construction trucks.	1. Final review and approval of design plans and specifications.	1. DWR	1. During design	1.
2. Monitor construction activities to verify that this measure is implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	2. Sign-off on inspection report and/or MMRP	2. DWR	2. During construction	2.

Measure 3.8-1d: During periods when Dyer Road is used by project construction trucks, DWR shall install warning signs on Dyer Road in advance of the train trestle to alert drivers of narrowed pavement width at the trestle undercrossing.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Incorporate into Contract Specifications, the requirement that warning signs will be installed on Dyer Road in advance of the train trestle during periods when Dyer Road is used by project construction trucks.	1. Final review and approval of design plans and specifications.	1. DWR	1. During design	1.
2. Monitor construction activities to verify that measure is implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	2. Sign-off on inspection report and/or MMRP	2. DWR	2. During construction	2.

Impact 3.8-2: Construction activities would generate a demand for parking spaces for construction worker vehicles.

No Mitigation Required.

Impact 3.8-3: Construction activities would intermittently and temporarily increase potential traffic safety hazards for vehicles, bicyclists and pedestrians on public roadways.

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Measure 3.8-3: DWR or its contractors shall obtain the necessary road encroachment permits prior to construction and will comply with the applicable conditions of approval. As deemed necessary by the governing jurisdiction, the road encroachment permits will require the contractor to prepare a traffic control plan in accordance with professional engineering standards prior to construction (see **Measure 3.8-1b**).

Impact 3.8-4: Construction activities would increase wear-and-tear on the designated haul routes used by construction vehicles to access the project work sites.

Measure 3.8-4: DWR and the affected jurisdiction(s) shall enter into an agreement prior to construction that will detail the pre-construction conditions and the post-construction requirements of the rehabilitation program. Roads damaged by construction would be repaired to a structural condition equal to that which existed prior to construction activity.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Prepare agreement between DWR and the affected jurisdiction(s) that will detail the pre-construction conditions and the post-construction requirements of the rehabilitation program, and that roads damaged by construction will be repaired to a structural condition equal to that which existed prior to construction activity. 2. Incorporate conditions of the agreement into Contract Specifications. 3. Monitor construction activities to verify compliance with agreement. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	1. Approval of the agreement. 2. Final review and approval of the design plans and specifications. 3. Sign-off on inspection report and/or MMRP	1. DWR 2. DWR 3. DWR	1. During development of specification 2. During development of specification 3. During construction	1. 2. 3.

HAZARDOUS MATERIALS

Impact 3.9-1: Construction excavation could encounter contaminated materials, causing an increase in risk of exposure (human and the environment) to hazardous materials.

Measure 3.9-1a: DWR shall incorporate into contract specifications, the requirement that, in the event that previously unidentified hazardous substances are encountered during construction, the contractor(s) will have a contingency plan for sampling and analysis of potentially hazardous substances and will coordinate with the appropriate regulatory agencies, if necessary. Evidence of potential hazardous contamination includes soil discoloration, noxious odors, presence of

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underground storage tanks, or buried building material. The required disposal method shall depend on the types and concentrations of chemicals identified in the soil. Any site investigations or remediation shall comply with applicable laws.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Incorporate into Contract Specifications, the requirement that, in the event that previously unidentified hazardous substances are encountered during construction, the contractor(s) will have a contingency plan for sampling and analysis of potentially hazardous substances and will coordinate with the appropriate regulatory agencies, if necessary.	1. Final review and approval of design plans and specifications.	1. DWR	1. During design	1.

Measure 3.9-1b: If unknown USTs are discovered during construction, the UST, associated piping, and impact soil shall be removed by a licensed and experienced UST removal contractor. The UST and contaminated soil shall be removed in compliance with applicable county and state requirements governing UST removal.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Incorporate into Contract Specifications, the requirement that if unknown USTs are discovered during construction, the UST, associated piping, and impact soil will be removed by a licensed and experienced UST removal contractor in compliance with applicable county and state requirements governing UST removal.	1. Final review and approval of design plans and specifications.	1. DWR	1. During design	1.

Impact 3.9-2: Construction activities requiring the use of hazardous materials may increase the risk of exposure to hazardous materials.

Measure 3.9-2a: Consistent with Storm Water Pollution Prevention Plan requirements identified in **Measure 3.2-1a**, DWR shall require the contractor to implement best management practices for handling hazardous materials onsite. The use of construction best management practices would minimize the potential negative effects on groundwater and soils, and will include the following:

- Follow manufacturer’s recommendations and regulatory requirements for use, storage and disposal of chemical products and hazardous materials used in construction;

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- Avoid overtopping construction equipment fuel gas tanks;
- During routine maintenance of construction equipment, properly contain and remove grease and oils.
- Properly dispose of discarded containers of fuels and other chemicals.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Include best management practices for handling hazardous materials onsite into Contract Specifications.	1. Final review and approval of design plan and specifications.	1. DWR	1. During design	1.

Measure 3.9-2b: In the event of an inadvertent release of hazardous materials during project operations, containment and cleanup shall occur in accordance with the applicable regulatory requirements.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Incorporate procedures for containment and cleanup of hazardous materials, in the event of an inadvertent release, into Contract Specifications.	1. Final review and approval of design plan and specifications.	1. DWR	1. During design	1.

Measure 3.9-2c: Oil and other solvents used during maintenance of construction equipment shall be recycled or disposed of in accordance with all applicable regulatory requirements. All hazardous materials shall be transported, handled, and disposed of in accordance with all applicable regulatory requirements.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Incorporate into Contract Specifications, the requirement that oil and other solvents used during maintenance of construction equipment will be recycled or disposed of in accordance with all applicable regulatory requirements and that all hazardous materials will be transported, handled, and disposed of in accordance with all applicable regulatory requirements.	1. Final review and approval of design plan and specifications.	1. DWR	1. During design	1.

Measure 3.9-2d: Abrasive blasting, or water blasting and metal work including weldings, cutting, and torch burning that involves removal of lead-based paints or primers shall be completed in strict compliance with worker safety regulations outlined in OSHA’s Lead in Construction Standard, Title 8 CCR 1532.1, as applicable. Implementation of BMPs including, but not limited to, constant light water spray, structure tenting, or fume hoods, would capture vapors, fumes, and dust generated from the painted metal work. Water, soil, or other media contaminated by lead dusts and fumes shall be removed from the site and disposed of. Excavations to capture spray or high-pressure stripping water shall be lined with impermeable materials (i.e., plastic sheeting) and constructed to direct water to lined sumps. Water in sumps shall be pumped into storage tanks prior to removal and disposal to an appropriate treatment, storage and disposal facility. Verification soil samples shall be collected in fall-out area following project completion to document the presence or absence of residual lead.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Incorporate into Contract Specifications, the requirement that abrasive blasting, or water blasting and metal work including weldings, cutting, and torch burning that involves removal of lead-based paints or primers shall be completed in strict compliance with worker safety regulations outlined in OSHA’s Lead in Construction Standard, Title 8 CCR 1532.1.	1. Final review and approval of design plan and specifications.	1. DWR	1. During design	1.
2. Incorporate into Contract Specifications, BMPs to decrease the risk of exposure to hazardous materials.	2. Final review and approval of design plan and specifications.	2. DWR	2. During design	2.

Measure 3.9-2e: A construction health and safety plan shall be prepared which describes hazardous materials used during construction and their associated health hazards, as required by the California Occupational Safety and Health Administration.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Incorporate into the Contract Specifications a requirement for the Contractor to prepare a Health and Safety Plan according to California Occupational Safety and Health Administration (OSHA) regulations.	1. Approval of the Health and Safety Plan.	1. DWR	1. Prior to construction	1.
2. Require Contractor compliance with the Health and Safety Plan submitted.	2. Sign-off on inspection report and/or MMRP.	2. DWR	2. During construction	2.

Impact 3.9-3: Construction activities in grassland areas would have the potential to expose people or equipment to risk of loss, injury, or death involving wildland fires.

Measure 3.9-3a: DWR will work closely with local fire districts to develop a fire safety plan which describes various potential scenarios and action plans in the event of a fire.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Require the Contractor to prepare a Fire Safety Plan which describes various potential scenarios and action plans in the event of a fire.	1. Approval of the Fire Safety Plan.	1. DWR	1. Prior to construction.	1.
2. Compliance with the Fire Safety Plan.	2. Sign-off on inspection report and/or MMRP.	2. DWR	2. During construction.	2.

Measure 3.9-3b: During construction all staging areas, welding areas, or areas slated for development using spark producing equipment, will be cleared of dried vegetation or other materials that could serve as fuel. Any construction equipment that includes a spark arrestor will be equipped with an arrestor in good working order.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Incorporate into Contract Specifications the requirement that all staging areas, welding areas, or areas slated for development using spark producing equipment, will be cleared of dried vegetation or other materials that could serve as fuel, and construction equipment that includes a spark arrestor will be equipped with an arrestor in good working order.	1. Final review and approval of design plan and specifications.	1. DWR	1. During design	1.
2. Monitor construction activities to verify that measure is implemented. If non-compliance is noted, notify the construction contractor of required actions and the deadline for compliance.	2. Sign-off on inspection report and/or MMRP.	2. DWR	2. During construction	2.

PUBLIC SERVICES AND UTILITIES

Impact 3.10-1: Construction of the proposed facilities could result in temporary, planned or accidental disruption of water deliveries to the three South Bay Contractors: Zone 7 Water Agency, Alameda County Water Agency, and Santa Clara County Water Agency.

Measure 3.10-1: Consistent with its current operational practices, DWR shall coordinate construction activities and delivery outage schedules with SBA Contractors and other affected agencies, as appropriate.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Coordinate construction activities and delivery outage schedules with SBA Contractors and other affected agencies, as appropriate.	1. Final review and approval of design plans and specifications.	1. DWR	1. During design and construction	1.

Impact 3.10-2: Pipeline construction could result in temporary, planned or accidental disruption to utility services.

Measure 3.10-2: A detailed study identifying utilities along the affected portions of the project alignment shall be conducted during the design stages of the project to complement the existing utilities study for the disturbed portions of the project alignment. For locations with adverse impacts, the following mitigations will be implemented:

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- a. Utility excavation or encroachment permits shall be acquired from the appropriate agencies. These permits include measures to minimize utility disruption. DWR and its contractors shall comply with permit conditions, and such conditions shall be included in construction Contract Specifications.
- b. Utility locations shall be verified through field survey (potholing) and use of the Underground Service Alert services.
- c. Detailed specifications shall be prepared as part of the design plans to include procedures for the excavation, support, and fill of areas around utility cables and pipes. All affected utility services shall be notified of DWR’s construction plans and schedule. Arrangements shall be made with these entities regarding protection, relocation, or temporary disconnection of services.
- d. DWR shall employ special construction techniques in areas where the pipeline would parallel underground utility lines. These special measures, which would be included in the engineering specifications, should include trench wall-support measures to guard against trench wall failure and possible resulting loss of structural support for the excavated areas.
- e. Residents and businesses in the SBA project corridor shall be notified of any planned utility service disruption two to four days in advance, in conformance with county and State standards.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Conduct detailed study identifying utilities along the affected portions of the project alignment to complement the existing utilities study for the disturbed portions of the project alignment.	1. Final review and approval of design plans and specifications.	1. DWR	1. During design	1.
2. Acquire utility excavation or encroachment permits from affected jurisdictions/agencies, and incorporate permit conditions into Contract Specifications.	2. Issuance of appropriate permits by affected jurisdictions/agencies. Final review and approval of design plans and specifications.	2. DWR	2. During design	2.
3. Verify utility locations through field survey (potholing) and use of the Underground Service Alert services.	3. Final review and approval of design plans and specifications.	3. DWR	3. During design	3.
4. Include procedures for the excavation, support, and fill of areas around utility cables and pipes, into Contract Specifications.	4. Final review and approval of design plans and specifications.	4. DWR	4. During design	4.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
5. Incorporate requirement to notify affected utility services of construction plans and schedule and make arrangements with these entities regarding protection, relocation, or temporary disconnection of services, into Contract Specifications.	5. Final review and approval of design plans and specifications.	5. DWR	5. During design	5.
6. Incorporate requirement to employ special construction techniques, such as trench wall-support measures, in areas where the pipeline would parallel underground utility lines, into Contract Specifications.	6. Final review and approval of design plans and specifications.	6. DWR	6. During design	6.
7. Incorporate requirement to notify residents and businesses in the SBA project corridor of any planned utility service disruption two to four days in advance, into Contract Specifications.	7. Final review and approval of design plans and specifications.	7. DWR	7. During design	7.
8. Post-construction inspection.	8. Sign-off on inspection reports and/or MMRP.	8. DWR	8. Post-construction	8.

Impact 3.10-3: Construction may result in utility conflicts or require relocation of existing utilities.

Measure 3.10-3: In conjunction with **Measure 3.10-1**, the following measures shall be implemented:

- Disconnected cables and lines shall be reconnected promptly.
- DWR shall observe DHS standards which require (1) a 10-foot horizontal separation between parallel sewer and water mains (gravity or force mains); (2) 1-foot vertical separation between perpendicular water and sewer line crossings. (In the event that separation requirements could not be maintained, DWR shall obtain DHS variance through provisions of sewer encasement, or other means deemed suitable by DHS.); and (3) encasing sewer mains in protective sleeves where a new water line crosses under or over an existing wastewater main.
- DWR shall coordinate final construction plans and specifications with affected utilities such as PG&E and DHS Sanitary Engineering Branch.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Incorporate requirement that disconnected cables and lines will be reconnected promptly, into Contract Specifications.	1. Final review and approval of design plans and specifications.	1. DWR	1. During design	1.
2. Incorporate requirement that Department of Health Services (DHS) standards will be observed regarding separation of water lines and sewer lines, into Contract Specifications.	2. Final review and approval of design plans and specifications.	2. DWR, DHS	2. During design	2.
3. Coordinate final construction plans and specifications with affected utilities such as PG&E and DHS Sanitary Engineering Branch.	3. Final review and approval of design plans and specifications.	3. DWR, PG & E and DHS	3. During design	3.
4. Post-construction inspection.	4. Sign-off on inspection reports and/or MMRP.	4. DWR	4. Post-construction	4.

Impact 3.10-4: Construction operations could require the displacement of one power generation wind turbine in the Altamont Pass area.

Implement **Measure 3.4-2a**.

Impact 3.10-5: Construction operations would potentially disrupt access to wind turbines in the Dyer Road area.

Measure 3.10-5: Implement **Measures 3.4-1a** and **3.4-1b** in **Section 3.4, Land Use, Planning and Recreation**; and **Measures 3.8-1a through 3.8-1d** in **Section 3.8, Traffic and Circulation**.

Impact 3.10-6: Construction activities for all facilities could require short-term police and fire protection services to assist in traffic management or in the event of an accident.

Measure 3.10-6: DWR shall provide, upon request, a copy of the Traffic Control Plan to the County sheriff's department, local police departments, County fire department, and local fire departments for their review prior to construction. DWR shall provide 72-hour notice to the local service providers prior to construction of individual pipeline segments. Discussion on the Traffic Control Plan is provided in **Section 3.8, Traffic and Circulation**, under **Measure 3.8-1b**.

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Impact 3.10-7: Project implementation would incrementally increase electrical demands at the SBPP. However, project implementation would provide for shifting of SBPP electrical demands to off-peak periods, thereby reducing peak electrical demands.

No Mitigation Required.

VISUAL RESOURCES

Impact 3.11-1: Proposed facilities could diminish the visual aesthetics at certain proposed sites.

Measure 3.11-1a: Following construction activities, the Department of Water Resources (DWR) shall restore disturbed areas by reestablishing existing topography and reseeded with a native seed mix typical of the immediately surrounding area.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Incorporate requirement to restore disturbed areas by reestablishing existing topography and reseeded with a native seed mix typical of the immediately surrounding area, into Contract Specifications.	1. Final review and approval of design plans and specifications.	1. DWR	1. During development of specifications	1.
2. Post-construction inspection that disturbed areas are restored to pre-existing condition.	2. Sign-off on inspection report and/or MMRP.	2. DWR	2. Post-construction	2.

Measure 3.11-1b: DWR shall use design elements to enhance visual integration of the proposed above-ground facilities with their surroundings. Proposed facilities shall be painted low-glare earth-tone colors that blend with the surrounding terrain.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Design above-ground facilities to enhance visual integration with their surroundings. Facilities will be painted low-glare earth-tone colors that blend with the surrounding terrain.	1. Final review and approval of design plans and specifications.	1. DWR	1. During design	1.
2. Post-construction inspection.	2. Sign-off on inspection reports and/or MMRP.	2. DWR	2. Post-construction	2.

Measure 3.11-1c: DWR shall ensure that lighting used for nighttime construction is shielded and directed downward to minimize impacts to neighboring residential areas.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Incorporate requirement that nighttime lighting used for construction is shielded and directed downward to minimize impacts to neighboring residential areas, into Contract Specifications.	1. Final review and approval of design plans and specifications.	1. DWR	1. During design	1.
2. Ensure compliance with lighting requirements.	2. Sign-off on inspection reports and/or MMRP.	2. DWR	2. During construction	2.

Measure 3.11-1d: DWR shall construct berms around the reservoir and vegetate the berms with native seed mixes.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Incorporate requirement to construct berms around Dyer Reservoir and vegetate the berms with native seed mixed, into Contract Specifications.	1. Final review and approval of design plans and specifications.	1. DWR	1. During design	1.
2. Post-construction inspection.	2. Sign-off on inspection reports and/or MMRP.	2. DWR	2. Post-construction	2.

Impact 3.11-2: Construction of the project components would introduce new sources of light onto the project sites and increase ambient light in the SBA project corridor.

Measure 3.11-2a: DWR shall ensure that all exterior lighting is shielded and directed downward to minimize impacts to neighboring residential areas. If necessary, landscaping shall be provided around proposed facilities. The vegetation shall be selected, placed, and maintained to minimize off-site light and glare onto surrounding areas. In addition, highly reflective building materials and/or finishes shall not be used in the designs for proposed structures.

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IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Incorporate requirement to shield exterior lighting and direct lighting downward to minimize impacts to neighboring residential area, into Contract Specifications.	1. Final review and approval of design plans and specifications.	1. DWR	1. During design	1.
2. Incorporate requirement that if landscaping around proposed facilities is necessary, vegetation will be selected, placed, and maintained to minimize off-site light and glare onto surrounding areas.	2. Final review and approval of design plans and specifications.	2. DWR	2. During design	2.
3. Incorporate requirement that highly reflective building materials and/or finishes will not be used in the designs for proposed structure, into Contract Specifications.	3. Final review and approval of design plans and specifications.	3. DWR	3. During design	3.
4. Post-construction inspection.	4. Sign-off on inspection reports and/or MMRP.	4. DWR	4. Post-construction	4.

GROWTH AND SECONDARY EFFECTS

Impact 4.1: The SBA Improvement and Enlargement Project would support a level of growth that is consistent with the amount planned and approved by the planning agencies within Zone 7’s service area. No appreciable growth in population or employment would occur as a direct result of construction or operation of the project facilities. However, the growth accommodated by the project would result in secondary environmental effects. Significant, unavoidable impacts could occur as a result of planned growth in the following areas: traffic and traffic congestion, air pollution, loss of agricultural land and open space, loss of wildlife habitat, alteration of the Valley’s visual character, grading and permanent changes in topography, increased traffic noise, increased demand for solid waste disposal capacity, seismic hazards, impacts to wildlife habitat, growth pressures for land conversion, lack of wastewater disposal capacity, cumulative demand for schools and parks, increased flooding potential, increased urban runoff pollutants, and increased energy demand.

No Mitigation Required.

CUMULATIVE EFFECTS

Impact 5.1: Concurrent construction of several infrastructure projects within the SBA project corridor, and capital improvement and development projects within the Livermore Valley, could result in cumulative short-term impacts associated with construction activities. These include short-term impacts to water quality, land use, air quality, noise, traffic, hazardous materials, public services and utilities, and visual resources. In some areas, particularly along Dyer Road, these

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impacts, while individually short term in nature, would be potentially significant due to their aggregate effect; however, construction-related impacts would not result in long-term alteration of the environment.

Measure 5.1: Zone 7 and DWR shall coordinate construction activities along selected alignments to identify overlapping pipeline routes, project areas, and construction schedules. To the extent feasible, construction activities shall be coordinated to consolidate the occurrence of short-term construction-related impacts.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTION	MONITORING RESPONSIBILITY	MONITORING SCHEDULE	COMPLETION DATE AND INITIALS
1. Construction activities will be coordinated along selected alignments to identify overlapping pipeline routes, project areas, and construction schedules. To the extent feasible, construction activities shall be coordinated to consolidate the occurrence of short-term construction-related impacts.	1. Final review and approval of design plans and specifications.	1. DWR and Zone 7	1. During design and construction	1.

Impact 5.2: Concurrent construction of projects within the Altamont Foothills, and capital improvement and development projects within the Livermore Valley, could result in cumulative long-term risk of upset impacts related to groundshaking and surface fault rupture during major earthquakes.

No Mitigation Required.

Impact 5.3: Concurrent construction of projects within the Altamont Foothills, and capital improvement and development projects within the Livermore Valley, could result in cumulative long-term impacts to water resource, water quality, and flooding impacts associated with alteration of drainage patterns and increases in impervious surface areas.

No Mitigation Required.

Impact 5.4: Concurrent construction of projects within the Altamont Foothills, and capital improvement and development projects within the Livermore Valley, would result in cumulative long-term impacts to sensitive grassland, wetland and vernal pool habitats, with secondary effects to special-status species, including: San Joaquin kit fox, burrowing owl, California red-legged frog, and California tiger salamander, fairy shrimp and fragrant fritillary and nesting sensitive birds.

Measure 5.4: Implement **Measures 3.3-1** and **3.3-2c**.

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Impact 5.5: Concurrent construction of projects within the Altamont Foothills, and capital improvement and development projects within the Livermore Valley, could result in cumulative long-term impacts to land use.

Measure 5.5: Implement **Measures 3.4-2a** and **3.4-2b**.

Impact 5.6: Concurrent construction of projects within the Altamont Foothills, and capital improvement and development projects within the Livermore Valley, could result in cumulative long-term impacts to cultural resources.

Measure 5.6: Implement **Measures 3.5-1** and **3.5-2**.

Impact 5.7: Concurrent construction of projects within the Altamont Foothills, and capital improvement and development projects within the Livermore Valley, could result in cumulative long-term impacts to visual resources.

Measure 5.7: Implement **Measures 3.11-1** and **3.11-2**.

EXHIBIT E

STATEMENT OF OVERRIDING CONSIDERATIONS

E.1 SUMMARY OF OVERRIDING CONSIDERATIONS

Section 15093 of the CEQA Guidelines establishes the following requirements for a Statement of Overriding Considerations:

- (a) CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered “acceptable”.
- (b) Where the decision of the public agency allows the occurrence of significant effects, which are identified in the final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. This statement may be necessary if the agency also makes a finding under Section 15091(a)(2) or (a)(3).
- (c) If an agency makes a statement of overriding considerations, the statement should be included in the record of the project approval and should be mentioned in the notice of determination.

Pursuant to Public Resources Code Section 21081 and CEQA Guidelines Section 15093, DWR adopts and makes the following Statement of Overriding Considerations regarding the remaining unavoidable impacts of the Proposed Project and the anticipated economic, legal, social, technological, environmental, and other benefits of the Proposed Project.

In considering the Proposed Project, DWR has weighed the benefits of the Proposed Project against the adverse impacts identified in the Final EIR as significant and potentially significant that have not been avoided or substantially lessened through mitigation to a level of less than significant. DWR hereby determines that the benefits of the Proposed Project outweigh the unmitigated adverse impacts and the Proposed Project should be approved. DWR finds that to the extent that the identified significant or potentially significant adverse impacts have not been avoided or substantially lessened, there are specific economic, legal, social, technological or other considerations which support approval of the project.

E.2 ADOPTION OF OVERRIDING CONSIDERATIONS

DWR specifically adopts this Statement of Overriding Considerations and finds that: a) as part of the approval provisions, the Proposed Project has eliminated or substantially lessened all significant effects on the environment where feasible; b) other mitigation measures to mitigate the secondary effects of growth associated with the Proposed Project are within the jurisdiction of other public agencies, and, c) the remaining unavoidable impacts of the Proposed Project are acceptable in light of the environmental, economic, legal, social, technological, and other considerations set forth herein, because the benefits of the Proposed Project outweigh the significant and adverse impacts of the Proposed Project, as noted below.

DWR finds that each of the overriding considerations set forth below constitutes a separate and independent ground for finding that the benefits of the Proposed Project outweigh its significant adverse environmental impacts and is an overriding consideration warranting approval of the Proposed Project. These matters are supported by substantial evidence in the record.

E.3 BENEFITS OF PROPOSED PROJECT

SECONDARY EFFECTS OF GROWTH

The Proposed Project cannot be implemented in a way that accomplishes the basic project objectives without accommodating growth under the adopted General Plans within the Zone 7 service area. Project objectives address these very issues, as the Proposed Project would provide adequate water supply to meet projected water demands associated with buildout under the adopted General Plans within the Zone 7 service area. In 1999, Zone 7 Board of Directors adopted Findings and a Statement of Overriding Considerations for the *Water Supply Planning Program – Program EIR* (1999 WSPP EIR) regarding the potential secondary effects of growth within the Zone 7 service area (Zone 7, 1999). DWR concurs with Zone 7's Findings and finds that the overall benefit of the Proposed Project outweighs these environmental impacts. Many of the benefits of providing adequate water supply for the Tri-Valley area, as provided under the Proposed Project, are those identified by the Cities within the Zone 7 service area associated with development of their corporate lands in accordance with their General Plans. These benefits outweigh the secondary effects of growth associated with implementation of the Proposed Project.

Overriding Considerations Adopted by the Cities for Secondary Effects of Planned Growth

Economic Considerations. Livermore, Pleasanton, Dublin, Alameda County and Contra Costa County acknowledge the economic benefit that these cities derive from implementation of their General Plans and associated specific plans, including provision of jobs, increased sales revenue and increased property tax revenue.

Social Considerations. The cities and counties acknowledge social benefits that derive from implementation of their General Plans and associated specific plans, including increases in

housing opportunities within the city and the region (particularly near growing commercial centers), increases in affordable housing, increases in each city's contribution to its fair share of the regional housing opportunities, and provision of a mix of housing types.

Environmental Considerations. The cities and counties acknowledge environmental benefits that derive from implementation of their General Plans and associated specific plans, including establishment of specific urban growth boundaries in some communities; protection of open space and agricultural areas through creation of permanent open space areas and dedicated parks, buffer zones, and provisions for transfer of development credits. Also, to the extent that increasing housing and employment opportunities within the local community and region increases the jobs/housing balance it can also reduce commuter travel miles and associated traffic congestion, transportation system support and associated air quality impacts of vehicle travel.

CUMULATIVE IMPACTS

The Proposed Project cannot be implemented in a way that accomplishes the basic project objectives without contributing to cumulative short-term impacts associated with construction activities. As discussed in Exhibit B, Findings, implementation of Measure 5.1 will partially mitigate these short-term cumulative impacts. As stated above, many of the benefits of providing adequate water supply for the Tri-Valley area, such as economic, social, and environmental benefits, have been identified by the Cities within the Zone 7 service area. These benefits outweigh the short-term cumulative impacts associated with construction activities from implementation of the Proposed Project.

REFERENCES

Zone 7 Board of Directors, Findings of Fact and Statement of Overriding Considerations for the *Water Supply Planning Program – Program EIR (Resolution 99-2056)*, July 1999.