CEQA FINDINGS

CalAm Monterey Peninsula Water Supply Project

I. INTRODUCTION

These findings are made pursuant to the California Environmental Quality Act (Public Resources Code sections 21000 *et seq.*; "CEQA") and CEQA Guidelines (California Code of Regulations, Title 14, sections 15000 *et seq.*) by the California Public Utilities Commission ("CPUC") in connection with the Final Environmental Impact Report/Environmental Impact Statement ("EIR/EIS")[1] prepared for the Monterey Peninsula Water Supply Project ("MPWSP"). The CPUC is the lead agency under CEQA for the MPWSP. A portion of the MPWSP is proposed to occur within the Monterey Bay National Marine Sanctuary ("MBNMS"), and therefore, the National Oceanic and Atmospheric Administration is the federal lead agency under the National Environmental Policy Act ("NEPA") for the MPWSP. (The CPUC and the NOAA shall be referred hereafter as "the Lead Agencies".)

These findings are based on substantial evidence in the entire administrative record and references to specific reports and specific pages of documents are not intended to identify those sources as the exclusive basis for the findings. These findings reflect the CPUC's independent judgment and analysis.

a. PURPOSE OF CEQA FINDINGS

CEQA findings play an important role in the consideration of projects for which an EIR is prepared. Under Public Resources Code section 21081 and CEQA Guidelines section 15091, where a Final EIR identifies one or more significant environmental effects, a project may not be approved until the public agency makes written findings supported by substantial evidence in the administrative record regarding each of the significant effects. In turn, the three possible findings specified in CEQA Guidelines section 15091(a) are:

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 finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

[1] Unless referring to a specific document, "EIR/EIS" shall mean the Final EIR/EIS, including the Draft EIR/EIS and all appendices and attachments to either document, as well as the Errata issued in July 2018.

3. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

CEQA Guidelines section 15092(b) provides that no agency shall approve a project for which an EIR was prepared unless either:

1. The project approved will not have a significant effect on the environment; or

2. The agency has:
    a. Eliminated or substantially lessened all significant effects where feasible as shown in the findings under CEQA Guidelines section 15091; and
    b. Determined that any remaining significant effects on the environment found to be unavoidable under CEQA Guidelines section 15091 are acceptable due to overriding considerations as described in CEQA Guidelines section 15093.

b. BRIEF DESCRIPTION OF THE PROJECT

The California-American Water Company ("CalAm") is a privately owned public water utility that serves the Monterey District with surface water and groundwater and has proposed the MPWSP to develop water supplies to serve its customers and find solutions to comply with its legal obligations, as discussed further in Section V. The EIR/EIS presents the MPWSP in two options, equally: a 9.6 mgd desalination project that is considered the "project" throughout the EIR/EIS and a smaller 6.4 mgd desalination plant with supplemental purchase water from the Pure Water Monterey Project ("PWM Project")[2] as an alternative. After consideration of the two options, as well as all of the alternatives in the EIR/EIS, the CPUC is approving the smaller variant as the project. Except where the term "9.6 mgd Project" is used, the term "Project" as used in these Findings shall mean the reduced-capacity 6.4 mgd desalination plant. The MPWSP shall be used in these Findings to mean either the 9.6 mgd Project or the Project.

II. ENVIRONMENTAL REVIEW OF THE PROJECT

Pursuant to CEQA and the CEQA Guidelines, the CPUC determined that an EIR would be required for the MPWSP. On October 5, 2012, the CPUC issued a Notice of Preparation for the MPWSP and circulated it to local, state, and federal agencies, to Native American tribal organizations, and to other interested parties for review and comments. The CPUC prepared a Draft EIR for the MPWSP to disclose the potential environmental effects of the MPWSP. On April 30, 2015, the CPUC published a Draft EIR and initiated a 60-day review period that was extended until September 30, 2015. Based upon comments received on the Draft EIR during the public review period, internal deliberations, and consultation with MBNMS, the CPUC and MBNMS determined that a joint EIR/EIS should be prepared for the MPWSP.

On August 26, 2015, the NOAA Office of National Marine Sanctuaries published a Notice of Intent to prepare an EIS under NEPA. On January 13, 2017, the CPUC and the NOAA, as Lead Agencies under CEQA and NEPA, respectively, published a Draft EIR/EIS that was circulated to local, state, and federal agencies, as well as interested organizations and individuals. The January 13, 2017 Draft EIR/EIS, issued for a 45-day public review period, included a description

[2] This was previously referred to in the EIR/EIS as the GWR Project.

of the 9.6 mgd Project and the Project, an assessment of the potential effects of both the 9.6 mgd Project and the Project, a description of feasible mitigation measures to reduce identified significant effects, and an evaluation of alternatives to the MPWSP. The EIR/EIS, pursuant to CEQA and NEPA, analyzed project related environmental effects relative to the following 19 substantive potential impacts:

- Geology, Soils and Seismicity
- Surface Water, Hydrology and Water Quality
- Groundwater Resources
- Marine Resources
- Terrestrial Biological Resources
- Hazards and Hazardous Materials
- Land Use, Land Use Planning and Recreation
- Traffic and Transportation
- Air Quality
- Greenhouse Gas Emissions
- Noise and Vibration
- Public Services and Utilities
- Aesthetic Resources
- Cultural and Paleontological Resources
- Agriculture and Forestry Resources
- Mineral Resources
- Energy Conservation
- Population and Housing
- Socioeconomics and Environmental Justice

The EIR/EIS included other CEQA substantive sections: an Executive Summary, Introduction and Background, Description of the Project, Alternatives, and Other Required Considerations. Although not explicitly required by CEQA or NEPA, the EIR/EIS included a section describing the current Water Demand, available Water Supplies and Water Rights for the MPWSP.

During this review period, the document was reviewed by various State, regional, and local agencies, as well as by interested organizations and individuals. The Lead Agencies received 82 comment letters and 2 form letter submissions, and 18 oral comments were made to CPUC staff at a public hearing.

The Final EIR/EIS was published on March 30, 2018. The Final EIR/EIS includes and responds to all comments concerning CEQA/NEPA issues that were received on the Draft EIR/EIS, and includes revisions to the Draft EIR/EIS text made in response to comments, as well as Lead Agency-initiated changes. Comment letters on the Final EIR/EIS were received from numerous individuals, organizations and agencies. An Errata document containing minor revisions to the Final EIR/EIS was published in August 2018.

III. THE ADMINISTRATIVE RECORD

The record, upon which all findings and determinations related to the approval of the Project are based for the purposes of CEQA compliance, includes the following:

- The EIR/EIS and all documents referenced in or relied upon by the EIR/EIS.
- All information (including written evidence and testimony) presented to the CPUC, CPUC staff, consultants, and others.
- All final applications, letters, testimony, exhibits, and presentations presented to the CPUC in connection with the EIR/EIS and the MPWSP.

- All information (including written evidence and testimony) presented at any CPUC public hearing or public meeting or CPUC workshop related to the Project and the EIR/EIS.
- The Mitigation Monitoring and Reporting Program for the Project.
- Matters of common knowledge to the CPUC that it may consider, including applicable state or local laws, ordinances and policies.
- All other documents comprising the record pursuant to Public Resources Code section 21167.6(e).

IV. CERTIFICATION AND CONSIDERATION OF THE EIR/EIS

In accordance with CEQA, the CPUC certifies that it has been provided copies of the Final EIR/EIS prepared by Environmental Sciences Associates (EIR SCH #2006101004) for the Lead Agencies, that the Final EIR/EIS was completed in compliance with CEQA, and that the Final EIR/EIS reflects the CPUC's independent judgment. The CPUC further certifies that it has reviewed and considered the information contained in the Final EIR/EIS prior to acting on the Project. The CPUC has reached its own conclusions on whether and how to approve the Project.

V. PROJECT DESCRIPTION

a. PROJECT BACKGROUND AND HISTORY

CalAm is a privately owned public water utility that serves the Monterey District with surface water and groundwater. The Monterey District encompasses most of the Monterey Peninsula, including the cities of Carmel-by-the-Sea, Del Rey Oaks, Monterey, Pacific Grove, Sand City, and Seaside, and the unincorporated areas of Carmel Highlands, Carmel Valley, Pebble Beach, and the Del Monte Forest. CalAm's water supply is sourced from surface water and groundwater from the Carmel River System and the coastal subarea of the Seaside Groundwater Basin. Since 1966, in order to service its 39,000 metered connections, CalAm has diverted up to approximately 10,730 acre-feet per year ("afy") of surface and/or subsurface flow from the Carmel River and pumped up to 4,000 afy groundwater from the Seaside Groundwater Basin.

CalAm's water supply faces legal constraints:

- In 1995, the State Water Resources Control Board ("SWRCB") issued Order 95-10, concluding that CalAm only had a legal right to 3,376 afy from the Carmel River, including surface water and water pumped from the Carmel Valley wells. The approximately 10,730 afy of surface and/or subsurface flow from the Carmel River that CalAm had been diverting was without a valid basis of right.

- In 2006, the Monterey County Superior Court adjudicated the rights of various entities to use groundwater resources from the Seaside Groundwater Basin, and reduced CalAm's rights to groundwater in the Seaside Groundwater Basin (from approximately 4,000 afy to 1,474 afy). To replenish the basin, CalAm must pay back the Seaside Groundwater Basin by approximately 700 afy over 25 years.

- In 2009, the State Water Board issued Cease and Desist Order 2009-0060, directing CalAm to "diligently implement actions to terminate its unlawful diversions from the Carmel River and … terminate all unlawful diversions from the river no later than December 31, 2016."

As a result, in April 2012, CalAm filed an application with the CPUC (Application A.12-04-019) for a Certificate of Public Convenience and Necessity to build, own, and operate the MPWSP. In 2013, CalAm provided testimony that a 9.6 mgd desalination plant would produce approximately 10,627 afy of desalinated product water.

- In 2016, the State Water Board adopted Cease and Desist Order 2016-0016, amending Orders 95-10 and 2009-0060 and extending the date by which CalAm must terminate all unlawful diversions to December 31, 2021. This Order also establishes annual milestones that CalAm must achieve in order to maintain the diversion limit through 2021 and for maintaining replacement water, such as through the MPWSP.

In order to meet the mandates under CDO 2016-0016, CalAm amended its application and project description in March 2016, specifically the estimates of the quantities of desalinated Project water that would be delivered to CalAm's service and returned to the Salinas Valley Groundwater Basin ("SVGB" or "Basin").

b. PHYSICAL DESCRIPTION

In order to comply with its legal obligations, CalAm has proposed the MPWSP to replace its current Carmel River diversions in excess of CalAm's legal entitlement of 3,376 afy, and develop water supplies to enable CalAm to reduce pumping from the Seaside Groundwater Basin from 4,000 to 1,474 afy. CalAm is also seeking a solution to replenish the Seaside Groundwater Basin by approximately 700 afy over 25 years and to develop a reliable water supply to service its customers in the Monterey District.

The 9.6 mgd Project described in the Final EIR/EIS is a source water intake system with 10 subsurface slant wells (8 active, 2 standby) extending offshore into the submerged lands of MBNMS, and a source water pipeline. The slant wells would be located on the CEMEX mining site and extract 24.1 million gallons per day (mgd) of source water. CalAm would own, construct, operate and maintain the wells and raw water conveyance facilities where the source water would then be delivered to a 9.6 mgd desalination plant, producing 10,750 afy. Other facilities would include pretreatment, reverse osmosis, and post-treatment systems, backwash supply and filtered water equalization tanks, chemical feed and storage facilities, brine storage and conveyance facilities, and other associated non-process facilities. CalAm also proposes improvements to the Seaside Groundwater Basin Aquifer Storage and Recovery ("ASR") System facilities, which could enable CalAm to inject desalination product water into the groundwater basin for subsequent extraction and distribution to customers (expanded ASR system).

CalAm's application for the MPWSP also included a variation of the 9.6 mgd Project (the two were presented in an "either/or" fashion) that would meet all of the project objectives: a reduced-capacity desalination plant (6.4 mgd) and supplemental advanced treated water (3,500 afy) from the PWM Project, (referred to in the EIR/EIS as the Pure Water Monterey Groundwater Replenishment Project, or simply the GWR Project), a project developed by Monterey One Water (formerly known as the Monterey Regional Water Pollution Control Agency, or MRWPCA) in partnership with the Monterey Peninsula Water Management District. The 6.4 mgd desalination plant is fully analyzed and considered in the Final EIR/EIS as Alternative 5a, and identified as the

environmentally superior alternative, both considered on its own and considered in conjunction with the PWM Project, which would supply the remainder of the water to achieve project objectives[3]. The approved PWM Project is assumed in the No Action alternative and also analyzed as a project in the cumulative scenario for Alternative 5a.

On September 15, 2016, by Decision 16-09-021, the CPUC approved the water purchase agreement allowing CalAm to purchase 3,500 afy of water from the Monterey Peninsula Water Management District that was produced by Monterey One Water from the PWM Project. The 6.4 mgd reduced desalination plant is the project being approved by the CPUC.

The main difference between the Project and the 9.6 mgd Project is that the Project will employ fewer slant wells and a smaller sized desalination plant. The remaining aspects of the Project would be the same as for the 9.6 mgd Project: the slant wells will be located at CEMEX, and the brine discharge/outfall facilities will have the same specifications as the 9.6 mgd Project. However, the Project's fewer slant wells and less volume of pumping will ultimately result in a reduced impact on groundwater levels.

VI. NO RECIRCULATION OF EIR/EIS REQUIRED

Public Resources Code section 21092.1 and CEQA Guidelines section 15088.5 dictate that, under certain circumstances, when new information is added to an EIR after it has been circulated for the required public review and comment period, the EIR must undergo another round of public review and comment. The Final EIR/EIS contains new information added in response to public comment. However, none of the new information triggers recirculation of the EIR/EIS. For instance, none of the data indicates that the Project would generate new or substantially more severe significant environmental effects than identified in the Draft EIR/EIS, or that new feasible alternatives or mitigation measures would clearly lessen Project significant effects but CalAm refuses to embrace such alternatives or mitigation measures. In addition, although CEQA does not provide a formal public comment period after publication of a Final EIR, numerous comments were submitted to the Lead Agencies on the Final EIR/EIS after its publication. The CPUC has analyzed all of such comments, as well as the party briefs concerning the Final EIR/EIS, and has concluded that none of these submittals require changes to the conclusions or mitigation measures within the EIR/EIS, or otherwise raise concerns that would trigger recirculation of the EIR/EIS.

VII. MITIGATION MEASURES, CONDITIONS OR APPROVAL AND MITIGATION MONITORING AND REPORTING PROGRAM

Public Resources Code section 21081.6 and CEQA Guidelines section 15097 require the CPUC to adopt a monitoring or reporting program to ensure that the mitigation measures and revisions to the Project identified in the EIR/EIS are implemented. The Mitigation Monitoring and Reporting Program ("MMRP") attached to the CPUC's Decision and incorporated by reference is

[3] The Final EIR/EIS concludes that the No Project Alternative is the environmentally superior alternative. However, consistent with CEQA's directive to identify the environmentally superior action alternative, the Final EIR/EIS identifies Alternative 5a as the environmentally superior alternative. Further, as discussed below, the No Project Alternative is infeasible in that it fails to meet the basic objectives of the project.

being adopted by the CPUC concurrent with and as part of Project approval. The MMRP satisfies the requirements of CEQA.

The mitigation measures set forth in the MMRP are specific and enforceable and are capable of being fully implemented by the efforts of the CPUC, other identified responsible agencies, or CalAm. As appropriate, some mitigation measures define performance standards to ensure that no significant environmental impacts will result. The MMRP adequately describes implementation procedures, monitoring responsibility, reporting actions, compliance schedule, and verification of compliance in order to ensure that the Project complies with the adopted mitigation measures.

The MMRP contains measures to substantially lessen or eliminate significant environmental effects where feasible. The CPUC has thus committed to enforcing the mitigation measures contained in the MMRP and has adopted the MMRP as enforceable conditions of approval for the Project. CalAm must comply with the MMRP regarding the Project. The mitigation measures incorporated into and imposed as part of the MMRP will not have significant impacts that were not analyzed in the EIR/EIS.

VIII. WATER RIGHTS

Most CEQA documents do not address the topic of water rights; however, the EIR/EIS explores in considerable detail whether CalAm would likely possess legal rights to the supply water for the Project. This issue is considered as a Project feasibility matter. The supply water for the Project will be via underground slant wells that draw water from the aquifers that extend underneath the ocean and would be recharged primarily by seawater. These wells will be located at the western edge of the SVGB, a large basin that extends approximately 100 miles from the Monterey Bay to the Salinas River headwaters.

By letter dated September 26, 2012, the CPUC asked that the SWRCB assist the CPUC and issue an opinion as to whether CalAm has a credible legal claim to the supply water for the MPWSP. After careful consideration, the SWRCB prepared a draft report on water rights, circulated that draft for public comments and ultimately issued its July 31, 2013, Final Review of California American Water Company's Monterey Peninsula Water Supply Project ("SWRCB Report"). The SWRCB Report determined that extracting water from the ocean does not require water rights and CalAm could draw ocean water from the landward area of the Basin. However, as evaluated in detail in the EIR/EIS, a portion of the Project source water is expected to be brackish water, a combination of ocean water and fresh water originating from the inland aquifers of the Basin. This has raised questions about whether CalAm will possess the appropriative legal right to retrieve and export Basin water that is not ocean water, i.e., the fresh water component of the Project supply water. As explained in the SWRCB Report and in the EIR/EIS, in order for CalAm to possess appropriative rights to the fresh water under a "developed water" legal basis, whereby the Project essentially creates a new water source, CalAm would need to be able to demonstrate that its withdrawal of Basin water that is *not* ocean water would not injure or harm other existing Basin water rights holders. There is no permit for such appropriative water rights. This means that CalAm cannot have secured the water right prior to this stage and cannot obtain a water rights permit before Project implementation. Rather, it is the implementation of the Project in a manner that meets the criteria that would create the appropriative water right.

Based upon the analysis in the EIR/EIS, the Project would draw primarily seawater. The "capture zone" within which the Project would draw source water could include some brackish water that contains fresh water, but is not expected to intersect with or draw fresh water on its own. Such

brackish water is not useful and usable in its current state. Thus, the withdrawal of the fresh water component of the source water is not expected to cause harm or injury to existing legal water users. Furthermore, CalAm proposes that Basin groundwater could be extracted without harm to existing lawful water uses by returning desalinated product water into the Basin in the amount of the fresh water molecules that originated in the Basin that are included in the withdrawn brackish water. Such return of Basin fresh water would be accomplished by supplying water to the Castroville Community Services District ("CCSD") for municipal water supply (in lieu of groundwater pumping from the Basin) and also to the Castroville Seawater Intrusion Project ("CSIP"). The return water component of the Project ensures that the Basin is made whole with regards to any fresh water withdrawn by the Project supply wells. In addition, CalAm has proposed an Applicant Proposed Measure to address and alleviate any actual harm or injury that the Project creates for existing Basin water users. Such measure, while voluntarily proposed by CalAm, is required as a condition of Project approval and is included with the MMRP, such that the CPUC will monitor and ensure its implementation. In light of the evidence in the EIR/EIS and otherwise in the administrative record, the CPUC concludes that CalAm's extraction will not harm the quality of the Basin water, and over the years, by returning supply water to the Basin, the Project will ultimately benefit Basin groundwater users. Therefore, the CPUC concludes that there is every reason to believe that CalAm will possess legal water rights for the Project and that the Project is not made infeasible by concerns over water rights.

IX. FINDINGS REGARDING SIGNIFICANT IMPACTS

In accordance with Public Resources Code section 21081 and CEQA Guidelines sections 15091 and 15092, the CPUC adopts the findings and conclusions regarding impacts and mitigation measures that are set forth in the EIR/EIS and summarized in the MMRP. These findings do not repeat the full discussions of environmental impacts contained in the EIR/EIS. The CPUC ratifies, adopts, and incorporates the analysis, explanation, findings, responses to comments and conclusions of the EIR/EIS.

The CPUC recognizes that the environmental analysis of the Project raises controversial environmental issues, and that a range of technical and scientific opinion exists with respect to those issues. The CPUC acknowledges that there are differing and potentially conflicting expert and other opinions regarding the Project and its environmental effects. The CPUC has, through review of the evidence and analysis presented in the record, acquired a comprehensive understanding of the breadth of this technical and scientific opinion and of the full scope of the environmental issues presented. This understanding has enabled the CPUC to make fully informed, thoroughly considered decisions after taking account of the various viewpoints on these important issues and reviewing the record. These findings are based on a full appraisal of all viewpoints expressed in the EIR/EIS, as well as other relevant information in the record of the proceedings for the Project.

The EIR/EIS concludes that the environmental impacts related to geology, soils and seismicity; surface water, hydrology and water quality; groundwater resources; marine biological resources; hazards and hazardous materials; land use, land use planning and recreation; traffic and transportation; public service and utilities; aesthetic resources; cultural and paleontological resources; greenhouse gas emissions; agricultural resources; energy conservation; socioeconomic and environmental justice can be reduced to a less than significant level through the implementation of specified mitigation measures, as discussed below. However, the Project will have significant unavoidable impacts related to terrestrial biology (including cumulative impacts), air quality (including cumulative impacts), noise and vibration (including cumulative impacts),

cumulative transportation and traffic and cumulative indirect growth. There are no feasible mitigation measures or alternatives to avoid or reduce these impacts to a less than significant level.

a. FINDINGS REGARDING IMPACTS ANALYZED IN THE EIR/EIS AND DETERMINED TO BE MITIGATED TO LESS THAN SIGNIFICANT

4.2 Geology, Soils, and Seismicity

Impact 4.2-1: Substantial soil erosion or loss of topsoil during construction.

a. Impact: Grading, excavation, and backfill activities for construction of the Source Water Pipeline, new Desalinated Water Pipeline, and Castroville Pipeline, ASR-5 and ASR-6 Wells, and the Carmel Valley Pump Station could result in the loss of topsoil (a fertile soil horizon that typically contains a seed base) if there is a well-developed topsoil horizon and it is mixed with other soil horizons or otherwise lost during excavation and backfilling. Impacts related to the loss of topsoil during construction of these components would be significant.

b. Mitigation: See Impact 4.6-2 in Section 4.6, Terrestrial Biological Resources, below, for a description of Mitigation Measure 4.6-2b.

   See Impact 4.16-1 in Section 4.16, Agricultural Resources, below, for a description of Mitigation Measure 4.16-1.

c. Findings: Implementation of Mitigation Measures 4.6-2b and 4.16-1 will reduce Impact 4.2-1 to a less-than-significant level by ensuring that topsoil is salvaged, separated according to soil type, maintained during construction, and backfilled in the appropriate location and density in the soil profile such that it is returned to near pre-construction condition. The CPUC has imposed Mitigation Measures 4.6-2b and 4.16-1 on the Project as a condition of approval of the Certification of Public Convenience and Necessity ("CPCN") and implementation will be monitored through the MMRP.

Impact 4.2-10: Accelerate and/or exacerbate natural rates of coastal erosion, scour, or dune retreat, resulting in damage to adjoining properties or a substantial change in the natural coastal environment.

a. Impact: Coastal retreat could migrate the beach inland such that the subsurface slant well casings, concrete well head vaults, electrical panels, and certain sections of conveyance pipelines would become located on the beach within the project lifetime. The exposure of the project components to wave action, storm events, and rip embayments could alter the existing natural beach dynamics and the coastal environment, resulting in an increase in beach erosion and/or an interruption in the sand supply to other beaches along the Monterey Bay.

b. Mitigation: In accordance with Mitigation Measure 4.2-10, CalAm shall conduct annual monitoring and report the rate of coastal retreat relative to the slant wells to establish an annual erosion rate to be used to estimate the year at which the wells and associated pipelines have 5 years before exposure. Beginning at least 5 years prior to

the anticipated exposure of the slant wells, CalAm shall implement the planning and permitting necessary to abandon the at risk slant well(s) in accordance with state well destruction standards. CalAm shall remove the slant well(s) from service prior to their exposure, and abandonment activities would be restricted to the snowy plover non-nesting season (October 1 through February 28) to avoid impacts on nesting plovers and other sensitive species. Abandonment procedures shall be pursuant to the requirements of State of California Well Standards Bulletin 74-81 and 74-90, Part III Section 23.

c. Findings: Implementation of Mitigation Measure 4.2-10 will reduce Impact 4.2-10 to a less-than-significant level by requiring CalAm to monitor coastal retreat rates and initiate well decommissioning before the beach migrates inland to the location of the subsurface slant wells. This will ensure that slant wells do not become exposed due to coastal retreat, and therefore, will not alter natural beach dynamics and the coastal environment, or cause further beach erosion. The CPUC has imposed Mitigation Measure 4.2-10 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.2-C: Cumulative impacts related to Geology, Soils, and Seismicity.

a. Impact:

Construction. Two of the Project's water conveyance pipelines (Castroville and New Desalinated Water Pipelines) and Transportation Agency for Monterey County's ("TAMC") Monterey Peninsula Light Rail Project would be constructed adjacent to each other and within the same alignment adjacent to active farmland and potentially in areas of sensitive natural communities that are dependent on the topsoil. If the Project and TAMC's project are constructed at the same time, the loss of topsoil impacts could have a significant cumulative impact to which the Project would make a considerable contribution.

Operation. As discussed in Impact 4.2-10, coastal retreat due to sea level rise is anticipated to result in coastal erosion and bluff retreat. Over time, coastal retreat is anticipated to migrate beaches inland, and structures located within the areas of coastal retreat could become located on beaches. The presence of structures on beaches could exacerbate shoreline erosion and scour and/or be subject to damage or failure associated with severe storm events. Several cumulative projects are located at the coast, particularly the sandy beach areas of Monterey Bay: Fort Ord Dunes State Park Campground, Monterey Bay Shores Resort, The Collection at Monterey Bay Resort, City of Seaside 90-inch Bay Avenue Outfall Phase 1, and City of Sand City Coastal Desalination Plant. The exposure of structures on the beach from one or more of these sites could result in increased scour and erosion that could result in cumulatively considerable impacts. Because over the Project lifetime, the subsurface slant well casings, concrete well head vaults, electrical panels, and certain sections of conveyance pipelines could become located on the beach and therefore, could exacerbate shoreline erosion and scour, the Project would make a considerable contribution to this cumulative impact.

b. Mitigation:

Construction. See Impact 4.6-2 in Section 4.6, Terrestrial Biological Resources, below, for a description of Mitigation Measure 4.6-2b.

See Impact 4.16-1 in Section 4.16, Agricultural Resources, below, for a description of Mitigation Measure 4.16-1.

Operation. See Impact 4.2-10, above, for a description of Mitigation Measure 4.2-10.

c. Findings: Implementation of Mitigation Measures 4.6-2b and 4.16-1 would reduce the significant cumulative impacts associated with construction to a less-than-significant level by ensuring that topsoil is salvaged, separated according to soil type, maintained during construction, and backfilled in the appropriate location and density in the soil profile such that it is returned to near pre-construction condition. Thus, after mitigation, topsoil would be replaced and there would be no substantial residual contribution to a cumulative impact. It is unknown whether the TAMC's Monterey Peninsula Light Rail Project would implement similar mitigation measures, although it is likely that existing regulations would require mitigation measures for sensitive natural communities.

Implementation of Mitigation Measure 4.2-10 would reduce the significant cumulative impact associated with operation to a less-than-significant level by requiring CalAm to monitor coastal retreat rates and initiate well decommissioning before the subsurface slant wells become located on the active beach. Thus, after mitigation, no project structures would become located on the active beach, and the residual contribution to a cumulative impact related to coastal erosion would be negligible.

The CPUC has imposed Mitigation Measures 4.6-2b, 4.16-1, and 4.2-10 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

4.3 Surface Water Hydrology and Water Quality

Impact 4.3-2: Degradation of water quality from construction-related discharges of dewatering effluent from open excavations and water produced during well drilling and development.

a. Impact: Dewatering could be required during construction to create a dry work area if surface water or groundwater is encountered in excavations. Sites with known soil and/or groundwater contamination are located close to or extend into the proposed construction alignments for pipelines. The contaminants with the potential to be encountered during project construction activities include petroleum hydrocarbons, VOCs, PAHs, and metals from gasoline service stations, and dry cleaners. The dewatering of contaminated groundwater during construction excavation activities would be considered a significant impact if the contaminated groundwater (i.e., dewatering effluent) were not handled properly and released into the environment. Although most dewatering effluent from general construction would be disposed of in accordance with General Waste Discharge Requirements (Central Coast RWQCB Order R3-2011-0223), discharges of dewatering effluent exceeding the water quality limitations in the General WDRs would result in a significant impact.

b. Mitigation: See Impact 4.7-2 in Section 4.7, Hazards and Hazardous Materials, below, for a discussion of Mitigation Measure 4.7-2b.

c. Findings: Implementation of Mitigation Measure 4.7-2b will reduce Impact 4.3-2 to a less-than-significant level by requiring CalAm or its contractor to develop a groundwater dewatering control and disposal plan that identifies locations where groundwater dewatering is likely to be required, the method to analyze groundwater for hazardous materials, and appropriate treatment and/or disposal methods. The CPUC has imposed Mitigation Measure 4.7-2b on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact: 4.3-4: Violate water quality standards or waste discharge requirements or degrade water quality from increased salinity as a result of brine discharge from the operation of the Project's Desalination Plant.

a. Impact: The analysis of salinity levels indicates that for all scenarios modeled, and assuming a continuous discharge stream, the Project brine-only discharges and discharges of brine combined with varying amounts of wastewater will meet 2016 California Ocean Plan salinity and dissolved oxygen standards and will not result in hypoxia on the ocean floor. The Project is substantially consistent with the MBNMS Desalination Guidelines for operational discharges regarding water quality and salinity. However, the Ocean Plan requires owners or operators of a desalination facility to submit a Monitoring and Reporting Plan to the Regional Water Quality Control Board for approval, which includes provisions for monitoring effluent and receiving water characteristics and impacts on all forms of marine life. Further, the Guidelines specify that a monitoring program should be developed to evaluate the extent of impacts from the plant's discharge operations on marine resources.

   A monitoring and reporting plan, consistent with the Ocean Plan requirements and MBNMS Guidelines for operation of a new desalination facility, has not been defined and proposed as part of the Project. Several of the parties to the CPUC proceeding have agreed upon terms of the brine discharge that establishes, in part, a detailed monitoring and reporting program that includes the collection of relevant, long-term water quality data. The intent of the monitoring program is to determine compliance with defined water quality standards and to implement specific corrective actions when non-compliance is determined to occur. While the monitoring plan defined by the settling parties is consistent with portions of the Ocean Plan requirements and the MBNMS Desalination Guidelines, it does not include biological monitoring to determine impacts on marine life. Additionally, the monitoring requirements defined in the Ocean Plan are broadly described and do not include specific thresholds, performance standards, or corrective actions.

   While impacts related to water quality from increased salinity have been determined to be less than significant based on model analyses, a monitoring and reporting plan needs to ensure compliance with the Ocean Plan monitoring requirements and consistency with MBNMS Guidelines for operation of desalination facilities that are protective of the beneficial uses (including aquatic wildlife and habitat) of Monterey Bay.

b. Mitigation: In accordance with Mitigation Measure 4.3-4, CalAm would be required to implement a comprehensive Monitoring and Reporting Plan following review and approval by the RWQCB and MBNMS that is consistent with the requirements and monitoring guidelines of the Ocean Plan and MBNMS Guidelines for desalination plants. The Plan shall include water quality monitoring protocols and monitoring

frequencies to assess baseline conditions and to track the compliance of the Project with the performance standard of ensuring operational discharges do not exceed ambient salinity by more than 2 ppt at the edge of the brine mixing zone ("BMZ"), as well as to assess the efficacy of any operational or design features implemented. If at the end of five complete years of monitoring operational discharges, the 24-hour average salinity measured at the edge of the BMZ is less than 75% of the salinity performance standard for 45 days without interruption under all discharge scenarios representative of typical operations (i.e. irrigation season and non-irrigation season operations), and with approval by the RWQCB and MBNMS, the discharger(s) may terminate the monitoring and reporting specified as part of this mitigation measure (but not terminate monitoring and reporting required as part of compliance with NPDES permit conditions or Ocean Plan monitoring and reporting requirements for discharges into California ocean waters).

c. Findings: Implementation of Mitigation Measure 4.3-4 will provide analysis and reporting that will determine the need for corrective actions to be implemented in the form of the design features and operational measures prescribed in Mitigation Measure 4.3-5 (discussed below) to reduce any identified impacts to less-than-significant levels. The CPUC has imposed Mitigation Measure 4.3-4 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.3-5: Violate water quality standards or waste discharge requirements or degrade water quality as a result of brine discharge.

a. Impact: Operational discharges from the Project may contain a variety of water quality constituents that, in high enough concentrations, could violate water quality standards or waste discharge requirements or otherwise degrade water quality and adversely affect the beneficial uses of the receiving waters in Monterey Bay and MBNMS resources. The model-based analyses concluded constituent concentrations would become elevated for the assessed discharge scenarios to levels greater than 80 percent of the Ocean Plan objective for ammonia and cyanide. Therefore, it was concluded that the Project would result in exceedances of Ocean Plan objectives, resulting in a significant impact related to water quality standards, waste discharge requirements and water quality of receiving waters in Monterey Bay.

b. Mitigation: In accordance with Mitigation Measure 4.3-5, prior to implementing operational discharges via the existing outfall, CalAm must perform an extensive water quality assessment as part of a waste disposal study to demonstrate compliance with Ocean Plan water quality objectives and minimum initial dilution requirements. Specifically, CalAm (and other dischargers, if applicable) would be required to analyze Project operational discharges for the full range of regulated water quality constituents specified in the Ocean Plan and NPDES water quality requirements, in accordance with protocols approved by the RWQCB. If the results of the water quality assessment and waste disposal study find that operational discharges will not meet the NPDES water quality requirements, including the Ocean Plan receiving water limitation for salinity, at the edge of the zone of initial dilution ("ZID") and the Brine Mixing Zone ("BMZ"), respectively, then the Project operational discharges shall not be released as proposed. Such operational discharges shall be subject to additional design features, engineering solutions, and/or operational measures to reduce the concentration of water quality constituents to be in conformance with the

Ocean Plan water quality objectives and amended NPDES permit requirements at the edge of the ZID or BMZ, as applicable. Such necessary design features and operational measures shall either be implemented individually or in combination to achieve compliance (unless the RWQCB determines that different but equally effective measures be employed).

c. Findings: Implementation of Mitigation Measure 4.3-5 will reduce Impact 4.3-5 to a less-than-significant level by prohibiting discharges if they do not conform to Ocean Plan objectives for water quality. Further, if the water quality assessment shows that releases via the existing outfall would exceed Ocean Plan objectives, then additional design features, engineering solutions, and/or operational measures must be implemented to reduce the concentration of water quality constituents in the operational discharges such that they conform with these objectives. The CPUC has imposed Mitigation Measure 4.3-5 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.3-C: Cumulative impacts related to Surface Water Hydrology and Water Quality

a. Impact:

Construction. Nearly all the cumulative projects involve excavation and use of heavy equipment during construction and have the potential to degrade surface water quality. If the Project's dewatering effluent from open excavations were to contain materials from previous spills or leaks, discharges of contaminated dewatering effluent to vegetated upland areas or the local storm drain system would result in a significant impact, which also could result in a cumulatively considerable contribution to cumulative surface water quality impact.

The water extracted during drilling and development of the subsurface slant wells and ASR-5 and ASR-6 Wells would be disposed in accordance with the RWQCB's General Waiver of WDRs for Specific Types of Discharges (General Waiver). However, dewatering of contaminated groundwater could result in a significant impact if released into the environment, which also could result in a cumulatively considerable contribution to a significant cumulative surface water quality impact.

Operation. At the project level, it is conservatively determined that under the assessed discharge scenarios, operational discharges from implementation of the Project could exceed Ocean Plan water quality objectives for certain constituents. This would result in a significant impact, and because the Ocean Plan water quality objectives are based on the effects of cumulative impacts on ocean water quality, an exceedance of water quality objectives also would represent a cumulatively considerable contribution to a potential significant cumulative impact.

b. Mitigation:

Construction. See Impact 4.7-2 in Section 4.7, Hazards and Hazardous Materials, below, for a description of Mitigation Measure 4.7-2b.

Operation. See Impacts 4.3-4 and 4.3-5, above, for a description of Mitigation Measures 4.3-4 and 4.3-5.

c. Findings: Implementation of Mitigation Measure 4.7-2b would reduce significant cumulative impacts associated with construction to a less-than-significant level by requiring construction contractors to comply with all relevant environmental regulations and plan for the safe and lawful disposal of contaminated groundwater, when encountered. Implementation of Mitigation Measures 4.3-4 and 4.3-5 would reduce significant cumulative impacts associated with project discharge scenarios to a less-than-significant level by ensuring that the Project complies with NPDES permit requirements as well as water quality objectives detailed in the Ocean Plan.

   The CPUC has imposed Mitigation Measures 4.7-2b, 4.3-4, and 4.3-5 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

4.4 Groundwater Resources

Impact 4.4-3: Deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level during operations.

a. Impact: The Project would extract mostly seawater and some brackish groundwater from a localized area; no fresh water supplies would be removed from the Basin. When water is returned to the Basin, groundwater elevations and the volume of water in storage would increase in the 400-Foot Aquifer underlying the CSIP and CCSD and adjacent areas. Water levels in nearby wells may decline in the 180-FTE Aquifer between 1 and 5 feet, but that would not expose screens, cause damage, or reduce yield in the groundwater supply wells. Injection and extraction through the ASR well system would be managed so that the water provided from the desalination plant would not constitute a net change in storage. The reduction of surface water from the Salinas River attributable to slant well pumping would not be a substantial loss to water supply, nor would it constitute a substantial interference to surface water recharge. Pumping at the slant wells could cause drawdown in the large dredge pond at CEMEX over periods of extended pumping, but the magnitude of that response would not interfere with recharge. Impacts associated with changes to groundwater recharge during the operation of all project facilities would be less than significant.

b. Mitigation: Although no mitigation is required to reduce this impact to less than significant, CalAm has proposed to expand the existing regional groundwater monitoring program to include the area where groundwater elevations are anticipated to decrease in the Dune Sand Aquifer, the 180-FTE Aquifer and the 400-Foot Aquifer as well as the Deeper Aquifer. In accordance with Applicant Proposed Measure 4.4-3, prior to the start of MPWSP slant well construction, CalAm, working with MCWRA, shall develop a groundwater monitoring and reporting program (the "Program") to the satisfaction of MCWRA. All costs of Program development and implementation shall be borne by CalAm either directly or through funding of MCWRA's staff, consultants and Program activities. The Program shall augment the MCWRA's existing regional groundwater monitoring network to focus on the area that could be affected by the proposed slant wells. The geographic area of the Program shall be within the model domain of the North Marina Groundwater Model, also referred to as NMGWM^{2016} and include the Dune Sand Aquifer, the 180-Foot Aquifer, the 400-Foot Aquifer and the Deeper Aquifer (i.e., the 900-Foot Aquifer) of the Salinas Valley Groundwater Basin (the "Monitoring Area"). The purpose of the

Program is to ensure that owners of existing public or private groundwater supply wells within the Monitoring Area on the date the MPWSP commences slant well pumping ("Active Supply Wells") suffer no harm as a result of MPWSP slant well pumping. If it is determined that an Active Supply Well has been damaged or otherwise negatively affected by Project slant well pumping, CalAm and the Monterey County Water Resources Agency hydrogeologist shall coordinate with the well owner to develop and implement a mutually agreed upon course of action, which may include but not be limited to repairing or deepening the existing well, restoring groundwater yield by improving well efficiency, facilitating an interim or long-term replacement of water supply, constructing a new well, or compensating the owner for increased pumping costs.

c. Findings: Implementation of Applicant Proposed Measure 4.4-3 would monitor changes in the groundwater surface elevations caused by the Project pumping at the slant wells through a voluntary program and use of new groundwater monitoring wells. If it is determined that the Project is causing groundwater levels to damage local active wells within the Dune Sand, 180-Foot/FTE, 400-Foot Aquifer or Deeper Aquifer, this measure would ensure that active wells are repaired or replaced and that water supplies are available to the well owner. Implementation of Applicant Proposed Measure 4.4-3 is not necessary to address any significant project effect. Applicant Proposed Measure 4.4-3 will further ensure that the impact remains at a less than significant level.

   The CPUC has imposed Applicant Proposed Measure 4.4-3 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.4-4: Violate any water quality standards or otherwise degrade groundwater quality during operations.

a. Impact: Slant well pumping at the CEMEX site could intersect the operable unit carbon tetrachloride plume (OUCTP) A-Aquifer plume and degrade groundwater in areas not affected by the current contaminant plume. The OUCTP Upper 180-Foot Aquifer Plume would not be impacted by the Project pumping because the magnitude of drawdown (about 1-2 feet) would be masked by the cone of depression currently created by the pump and treat remediation system. The Project would result in a less than significant impact related to interference with existing groundwater remediation activities, with the possible exception of two of the OUCTP plumes at the former Fort Ord. Impacts related to existing groundwater remediation systems would be significant.

b. Mitigation: In accordance with Mitigation Measure 4.4-4, prior to the start of Project construction, CalAm shall incorporate the future quarterly groundwater elevation monitoring results for the OUCTP A-Aquifer and 180-Foot Aquifer (upper and lower) plumes into its well monitoring program until the two OUCTP plumes have been appropriately remediated and the RWQCB no longer requires remediation activities. Groundwater elevation data shall be obtained from the periodic monitoring reports developed by the U.S. Army and its contractors to characterize the flow direction and water quality of the three OUCTP plumes located in the A-Aquifer, the Upper 180-Foot Aquifer and the Lower 180-Foot Aquifer. The groundwater elevation results shall be evaluated by CalAm and its consultants on a quarterly basis to assess whether the 1-foot drawdown contour from the proposed subsurface intake system is

approaching the edge of the OUCTP plumes. CalAm shall continuously coordinate with and include the U.S. Army in all pertinent correspondence during the groundwater data evaluation stages.

c. Findings: Implementation of Mitigation Measure 4.4-4 would monitor changes in the groundwater surface elevation caused by Project pumping near the two OUCTP Plumes. If it is determined that Project pumping could interfere with the Fort Ord plumes, this mitigation measure requires CalAm to take actions so the plumes do not expand and contaminate other areas, such as bearing the costs for work necessary to change the plume flow direction, arrest migration of the plumes, and/or to remediate areas of new contamination created by slant well pumping. This mitigation would reduce the impacts to less than significant. The CPUC has imposed Mitigation Measure 4.4-4 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

4.6 Terrestrial Biological Resources

Impact 4.6-1: Result in substantial adverse effects on species identified as candidate, sensitive, or special-status, either directly or through habitat modification, during construction.

a. Impact: Construction of the entire Project has the potential to temporarily impact up to 9 acres of potential western snowy plover habitat (up to 1 acre of permanent impact, leaving 8 acres temporarily impacted), temporarily impact up to 2.1 acres of Smith's blue butterfly habitat, temporarily impact up to 12.3 acres and permanently impact up to 15.4 acres of California tiger salamander habitat, and temporarily impact up to 13.3 acres and permanently impact up to 15.5 acres of California red-legged frog habitat. Construction activities associated with all proposed project facilities have the potential to result in significant impacts on special-status species.

b. Mitigation: In accordance with Mitigation Measure 4.6-1a, CalAm shall retain a Lead Biologist to oversee compliance with and implementation of avoidance and mitigation measures.

   In accordance with Mitigation Measure 4.6-1b, prior to starting work, all construction workers at the project areas shall attend a Construction Worker Environmental Awareness Training and Education Program developed and presented by the Lead Biologist, which ensures that workers are aware of special-status species that may occur in the project area and the measures to be implemented to avoid, minimize, and/or mitigate impacts.

   In accordance with Mitigation Measure 4.6-1c, the construction contractor shall implement avoidance and minimization measures to protect special-status species and sensitive natural communities including, clear delineation of the construction, staging, and access areas; soil stockpile management BMPs; erosion BMPs; fuel and fluid leak pollution prevention procedures; invasive species preventative measures; herbicide use BMPs; fencing requirements; work stoppage procedures in the event that a special-status species is found; vegetation removal and grading procedures; in advertent entrapment procedures; pipe inspection procedures; dust abatement procedures; and a trash abatement program.

In accordance with Mitigation Measure 4.6-1d, the construction contractor shall implement measures to protect western snowy plover, including conducting work only during the western snowy plover non-breeding season unless approved by the USFWS; retaining a biologist to evaluate and monitor the nature and extent of wintering plover activity in the project area; restoration of temporarily impacted plover habitat following construction; installation of anti-perching devices; and enacting a compensation program if permanent loss of plover habitat occurs.

In accordance with Mitigation Measure 4.6-1e, CalAm or its contractor shall conduct focused botanical surveys for special-status plants in all potentially suitable habitat during the appropriate blooming period for each species and in accordance with the guidelines established by the CDFW. Habitat maps shall be combined with previous survey results. Project facilities should be sited to avoid permanent and temporary impacts to special-status plants. Avoidance measures shall be applied as appropriate. CalAm shall comply with FESA/CESA by implementing USFWS and CDFW consultation requirements. Habitat Management Plan (HMP) species on Fort Ord shall be salvaged under the direction of a biologist. A compensation program may be enacted for temporary or permanent loss of special-status plant occurrences.

In accordance with Mitigation Measure 4.6-1f, CalAm or its contractor shall reduce impacts on Smith's blue butterfly by implementing measures, including following all avoidance and minimization measures required by USFWS as part of the FESA Section 7 consultation between ONMS and USFWS; conducting botanical surveys of all suitable habitat for the butterfly during Project design and prior to implementation; avoidance of mapped host plants; preparation of a protect-in-place and relocation plan if avoidance is not possible; restoration of butterfly habitat temporarily impacted during construction; and enacting a compensation program if permanent impacts occur to butterfly habitat.

In accordance with Mitigation Measure 4.6-1g, a biologist shall conduct preconstruction surveys for black legless lizard, silvery legless lizard, and coast horned lizard within 24 hours prior to the initiation of ground disturbing activities or vegetation clearing in suitable habitats such as central dune scrub, coast sage scrub, and central maritime chaparral.

In accordance with Mitigation Measure 4.6-1h, a biologist shall conduct protocol surveys for burrowing owl consistent with the methods of the CDFW. If burrowing owls are present, the biologist shall monitor the site during all construction activities. No ground disturbing activities shall be permitted within specified distances if burrowing owls are detected during the nesting and fledging seasons. A Burrowing Owl Exclusion Plan shall be developed by the biologist, approved by the CDFW and submitted to the CPUC, if necessary. If burrowing owls are found on-site, compensatory mitigation for the loss of breeding and/or wintering habitat shall be implemented onsite or offsite in accordance with consultation with the CDFW via a Burrowing Owl Habitat Monitoring Plan.

In accordance with Mitigation Measure 4.6-1i, a biologist shall conduct preconstruction nesting surveys for all nesting birds protected by the federal Migratory Bird Treaty Act and Section 3503 of the California Fish and Game Code. If active nests are found, nests shall be continuously surveyed for the first 24 hours prior to construction activities. All nests shall be continuously monitored to detect

behavioral changes as a result of the project, and appropriate avoidance and minimization measures shall be applied.

In accordance with Mitigation Measure 4.6-1j, a biologist shall conduct preconstruction surveys for American badger dens at potentially affected sites. If potential dens are identified, the biologist shall excavate the dens to prevent badgers from using during construction. If active dens are found during construction, avoidance and minimization measure shall be implemented.

In accordance with Mitigation Measure 4.6-1k, a biologist shall conduct preconstruction surveys for the Monterey dusky-footed woodrat 14 days prior to the start of construction in suitable habitat. Nests located within 50 feet of anticipated construction disturbance areas shall be identified, and additional surveys shall be conducted throughout construction. If nests are found, avoidance, minimization, and relocation measures shall be conducted.

In accordance with Mitigation Measure 4.6-1l, a biologist who is experienced with bat surveying techniques (including auditory sampling methods), behavior, roosting habitat, and identification of local bat species shall conduct a preconstruction habitat assessment to characterize potential bat habitat and identify active roost sites. The preconstruction habitat assessment shall be conducted within 100 feet of construction activities. If potential roosting habitat or potentially active bat roosts are identified during the habitat assessment in trees and/or structures to be disturbed under the project, the avoidance and minimization measures shall be implemented.

In accordance with Mitigation Measure 4.6-1m, a botanist or arborist shall conduct surveys for native stands of Monterey pine prior to completion of final project design documents. Individual Monterey pine trees existing within the construction work area shall be evaluated to determine if they are native occurrences, relics, or otherwise naturally-occurring remnants of the past historic range. To the extent feasible, project facilities shall be sited and construction activities planned to avoid impacts on native stands of Monterey pine. Any native stands located within a construction disturbance area shall be fenced or flagged for avoidance prior to construction, and a biological monitor shall be present to ensure compliance with off-limits areas. If removal of native stands of Monterey pine cannot be avoided, trees shall be replaced at a 2:1 ratio for trees removed or directly impacted by construction activities.

In accordance with Mitigation Measure 4.6-1n, CalAm shall develop and submit a Habitat Mitigation and Monitoring Plan (HMMP) to the appropriate resource agencies (CCC, CDFW, CCRWQCB, USACE, USFWS, and local agencies that require a habitat mitigation and monitoring plan) for approval prior to project construction. The HMMP will be a comprehensive document that will describe all of restoration and compensatory mitigation requirements, including the required performance standards, identified in Mitigation Measures 4.6-1d, 4.6-1e, 4.6-1f, 4.6-1h, 4.6-1m, 4.6-1o, and 4.6-2b. The HMMP shall be implemented at all areas where special-status species habitat or sensitive natural communities will be restored, created, or enhanced to mitigate for project impacts either prior to, concurrently with, or following project construction, as specified in the HMMP. The HMMP shall outline measures to be implemented, depending on the mitigation requirements, to restore, improve, or re-establish special-status species habitat, sensitive natural communities, and critical habitat on the site.

In accordance with Mitigation Measure 4.6-1o, a biologist must conduct a preconstruction survey 5 days prior to, and immediately prior to vegetation removal, grading, or the installation of exclusion fencing, for California red-legged frog and California tiger salamander in suitable habitat where there is moderate to high potential for these species to occur. If necessary, the biologist shall prepare a relocation plan that must be submitted to USFWS and CDFW for approval. Any vacant burrows shall be collapsed. If take authorization is not obtained from CDFW and USFWS for California tiger salamander, then all small mammal burrows within dispersal distance of a known or potential breeding pond shall be avoided by a minimum buffer of 50 feet. Upon completion of construction activities, CalAm shall restore California tiger salamander and California red-legged frog habitat temporarily impacted during construction. Compensatory mitigation for permanent impacts shall be provided either onsite or offsite at a minimum ratio of 2:1. Compensation for permanent impacts may be in the form of permanent on-site or off-site creation, restoration, enhancement, or preservation of habitat.

In accordance with Mitigation Measure 4.6-1p, the construction contractor shall implement best management practices in construction areas within or adjacent to lands with native plant communities that may be susceptible to non-native plant species invasion to prevent the spread of invasive plants, seed, propagules, and pathogens.

In accordance with Mitigation Measure 4.6-1q, a licensed geotechnical engineer shall develop a Frac-out Contingency Plan for approval from appropriate resource agencies prior to the start of construction of any pipeline that will use HDD installation. The Plan shall be implemented at all areas where HDD installation under a waterway would occur to avoid, minimize, or mitigate for project impacts either prior to, concurrently with, or following HDD installation, as specified in the Plan.

See Impact 4.12-1 in Section 4.12, Noise and Vibration, below, for a summary of Mitigation Measure 4.12-1b, General Noise Controls for Construction Equipment.

See Impact 4.14-2 in Section 4.14, Aesthetic Resources, below, for a summary of Mitigation Measure 4.14-2, Site Specific Nighttime Lighting Measures.

c. Findings: Implementation of Mitigation Measures 4.6-1a through 4.6-1q, 4.14-1b, and 4.14-2 will reduce Impact 4.6-1 to a less-than-significant level by designating a lead biologist to oversee and ensure implementation of special-status species protective measures; requiring worker training regarding special-status species potentially present to ensure that workers are aware of special-status species that occur in the Project area and the measures to be implemented to avoid, minimize, and/or mitigate impacts; requiring general measures such as installation of an exclusion fencing to ensure special-status species do not occur within the construction area, a trash abatement program to ensure special-status species predators are not attracted to the site, and other measures to avoid and minimize impacts on special-status species; requiring specific measures to avoid, minimize, and compensate for impacts on the western snowy plover such as avoiding the breeding season, installing a visual construction barrier for work conducted adjacent to breeding habitat during the breeding season to reduce human disturbance to plovers, conducting pre-construction surveys to determine if plovers are present and implementing minimization measures to minimize construction impacts on plovers, if present, and

compensating for habitat loss to mitigate for temporary and permanent loss of habitat; requiring specific measures to avoid and minimize impacts on special-status plants such as avoiding individual plants to the extent feasible and compensating for temporary or permanent loss of special-status plants at a level acceptable to the applicable resource agencies; requiring specific measures to avoid and minimize impacts on Smith's blue butterfly such as avoiding host plants to the extent feasible to avoid impacts to individuals, relocating host plants, duff, and/or soil that cannot be avoided, and providing compensatory mitigation for permanent impacts; requiring specific measures to avoid and minimize impacts on black legless lizard, silvery legless lizard, and coast horned lizard such as relocating individuals to areas outside of the construction area to avoid injury or mortality from construction; requiring measures to avoid and minimize impacts on western burrowing owl such as conducting pre-construction surveys to determine if owls are present, requiring a no-disturbance buffer around nesting sites or occupied burrows, and potentially excluding wintering burrowing owls from the work area, and compensating for loss of habitat; requiring specific measures to avoid and minimize impacts on nesting birds such as limiting construction to the non-nesting season when feasible to avoid impacts to active nests and requiring a no-disturbance buffer around active nests if work is scheduled during the nesting season; requiring specific measures to avoid and minimize impacts on American badger such as conducting pre-construction surveys to identify whether any badger dens are present and avoiding and/or passively relocating badgers from dens as necessary to avoid and minimize impacts to badgers within active dens; requiring measures to avoid and minimize impacts on Monterey dusky-footed woodrat such as relocating active nests within the construction area to areas outside of the construction area to minimize impacts to individual woodrats from construction activities; requiring measures to avoid and minimize impacts on special-status bats such as limiting removal of trees or structures with potential bat roosting habitat to the time of year when bats are active to avoid disturbing bats during the maternity roosting season or months of winter torpor; developing and implementing a mitigation and monitoring plan for temporarily and permanently impacted sensitive habitats to ensure that temporary and permanent losses are fully compensated as required; requiring measures to avoid and minimize impacts on native stands of Monterey Pines such as avoiding any stands present to avoid tree loss and replacing trees that cannot be avoided to compensate for any loss; developing and implementing a mitigation and monitoring plan for temporarily and permanently impacted sensitive habitats to ensure that temporary and permanent losses are fully compensated as required; requiring measures to avoid and minimize impacts on California red-legged frog and California tiger salamander such as pre-construction surveys to determine if these species are present and implementing minimization measures to minimize construction impacts on these species, if present, and compensating for permanent impacts; requiring implementation of measures to reduce the introduction or spread of invasive species that may degrade habitat for special-status species such as cleaning tools and equipment before entering and leaving worksites, avoiding driving or operating equipment in weed-infested areas, and covering non-active stockpiles; requiring preparation of a Frac-out Contingency Plan and implementation of measures in the Plan to contain and clean-up any frac-outs in waterways to minimize impacts of frac-outs on special-status species and their habitat; requiring implementation of noise controls for construction equipment to reduce noise impacts on special-status wildlife species; and requiring measures to minimize light spillover outside of the construction area to minimize construction lighting impacts on special-status wildlife species. The CPUC has imposed

Mitigation Measures 4.6-1a through 4.6-1q, 4.14-1b, and 4.14-2 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.6-2: Result in substantial adverse effects on riparian habitat, critical habitat, or other sensitive natural communities during construction.

a. Impact: Construction of the entire Project has the potential to temporarily impact up to 23 acres and permanently impact up to 1 acre of central dune scrub, temporarily impact up to 0.2 acre and permanently impact up to 0.06 acre of northern coastal scrub, temporarily impact up to 11 acres of central maritime chaparral, temporarily impact up to 0.7 acre and permanently impact up to 0.04 acre of oak woodland, temporarily impact up to 0.06 acre of freshwater marsh, and temporarily impact up to 1.3 acre of riparian woodland and scrub. Overall, construction of the Project would temporarily impact up to 35 acres and permanently impact up to 1 acre of environmentally sensitive habitat areas (ESHA). Impacts on riparian and critical habitat, and other sensitive natural communities during construction would be significant.

b. Mitigation: See Impact 4.6-1, above, for a description of Mitigation Measures 4.6-1a through 4.6-1d, and 4.6-1n though 4.6-1q.

   In accordance with Mitigation Measure 4.6-2a, parts of the project area that occur within the Coastal Zone would require a Coastal Development Permit. Prior to the initiation of ground-disturbing activities CalAm shall consult with the CCC or local jurisdiction and obtain the necessary permit(s) in order to proceed with the Project. The CCC or local agency would authorize the project if it conforms to ESHA policies or other policies of the Coastal Act.

   In accordance with Mitigation Measure 4.6-2b, CalAm and/or its construction contractor(s) shall implement avoidance, minimization, and compensation measures for sensitive natural communities, the special-status species that utilize these sensitive communities, ESHA as defined by the California Coastal Commission (CCC) or in a local coastal plan (LCP), and primary habitat as defined in the City of Marina's Local Coastal Land Use Plan (LCLUP). Compensatory mitigation for permanent loss from periodic maintenance of the subsurface slant wells shall only be applied once and would not be applied for each five-year maintenance event.

c. Findings: Implementation of Mitigation Measures 4.6-1a through 4.6-1d, 4.6-1n through 4.6-1q, and 4.6-2a and 4.6-2b would reduce impacts on sensitive natural communities, critical habitat and ESHA to a less-than-significant level by designating a lead biologist to oversee and ensure implementation of sensitive natural community protective measures; requiring worker training regarding sensitive natural communities potentially present to ensure that workers are aware of sensitive natural communities that occur in the project area and the measures to be implemented to avoid, minimize, and/or mitigate impacts; requiring general measures such as staking or flagging the construction area to ensure work is restricted to the construction footprint and avoids adjacent sensitive natural communities and other measures to avoid and minimize impacts on sensitive natural communities; requiring specific measures to avoid, minimize, and compensate for impacts on the western snowy plover such as avoiding the breeding season, installing a visual construction barrier

for work conducted adjacent to breeding habitat during the breeding season to reduce human disturbance to plovers, conducting pre-construction surveys to determine if plovers are present and implementing minimization measures to minimize construction impacts on plovers, if present, and compensating for habitat loss to mitigate for temporary and permanent loss of habitat; requiring specific measures to avoid and minimize impacts on special-status plants such as avoiding individual plants to the extent feasible and compensating for temporary or permanent loss of special-status plants at a level acceptable to the applicable resource agencies; developing and implementing a mitigation and monitoring plan for temporarily and permanently impacted sensitive habitats to ensure that temporary and permanent losses are fully compensated as required; requiring measures to avoid and minimize impacts on California red-legged frog and California tiger salamander such as pre-construction surveys to determine if these species are present and implementing minimization measures to minimize construction impacts on these species, if present, and compensating for permanent impacts; requiring implementation of measures to reduce the introduction or spread of invasive species that may degrade sensitive habitat such as cleaning tools and equipment before entering and leaving worksites, avoiding driving or operating equipment in weed-infested areas, and covering non-active stockpiles; requiring preparation of a Frac-out Contingency Plan and implementation of measures in the Plan to contain and clean-up any frac-outs in waterways to minimize impacts of frac-outs on sensitive habitat; ensuring the Project conforms to ESHA policies; and requiring measures to avoid and minimize impacts on sensitive natural communities such as requiring that staging areas are located away from sensitive communities to minimize project impacts to these resources and compensating for loss of habitat. The CPUC has imposed Mitigation Measures 4.6-1a through 4.6-1d, 4.6-1n through 4.6-1, and 4.6-2a and 4.6-2b on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.6-3: Result in substantial adverse effects on federal wetlands, federal other waters, and/or waters of the State during construction.

a. Impact: Construction of the Project has the potential to temporarily impact up to 1.6 acre of federal wetlands, federal other waters, and/or waters of the state as a result of placement of fill, removal of a water/wetland feature, and/or the potential for construction activities or construction worker foot traffic to extend beyond the designated construction work area. Impacts on federal wetlands, federal other waters, and/or waters of the State during construction would be significant.

b. Mitigation: See Impact 4.6-1, above, for a description of Mitigation Measures 4.6-1a through 4.6-1c, and 4.6-1q.

   In accordance with Mitigation Measure 4.6-3, CalAm shall conduct a jurisdictional wetland delineation to determine the extent of waters of the U.S. and waters of the state within the Project component's footprints and anticipated construction disturbance area. The Project shall be designed to avoid and/or minimize direct impacts on wetlands and/or waters under the jurisdiction of the U.S. Army Corps of Engineers, RWQCB, California Department of Fish and Wildlife, and/or the CCC to the extent feasible. Horizontal Directional Drilling or other trenchless or above water methods will be used at all pipeline crossings of wetlands and other waters of the U.S. and of the state, except some small order seasonal or ephemeral drainages which

do not support riparian woodland, riparian scrub, marsh or other wetland vegetation, and which would be crossed during the dry season in the absence of flow or standing water.

Where disturbance to jurisdictional waters cannot be avoided, any temporarily impacted jurisdictional water shall be restored to pre-construction conditions or better at the end of construction. Compensation for permanent impacts shall be provided at a 2:1 or greater ratio. Compensation shall be detailed on a project-specific basis and shall include development of a Wetland Mitigation and Monitoring Plan (WMMP), which shall be developed prior to the start of construction and in coordination with permit applications and/or conditions. Alternatively, offsite mitigation credits may be purchased at an approved mitigation bank; if no banks are available, then alternative mitigation may be achieved through payment of in-lieu fees.

c. Findings: Implementation of Mitigation Measures 4.6-1a through 4.6-1c, 4.6-1q, and 4.6-3 would reduce impacts on waters of the U.S. and/or waters of the state to a less-than-significant level by designating a lead biologist to oversee and ensure implementation of protective measures for jurisdictional waters; requiring worker training regarding jurisdictional waters potentially present to ensure that workers are aware of jurisdictional waters that occur in the Project area and the measures to be implemented to avoid, minimize, and/or mitigate impacts; requiring general measures such as staking or flagging the construction area to ensure work is restricted to the construction footprint and avoids adjacent jurisdictional waters and other measures to avoid and minimize impacts on jurisdictional waters; requiring preparation of a Frac-out Contingency Plan and implementation of measures in the Plan to contain and clean-up any frac-outs in waterways to minimize impacts of frac-outs on special-status species and their habitat; and requiring the Project to be designed to avoid and/or minimize direct impacts on jurisdictional waters to the extent feasible, using HDD or other trenchless methods to install pipeline underneath wetlands or waters (with some exceptions), and compensating for loss of jurisdictional waters. The CPUC has imposed Mitigation Measures 4.6-1a through 4.6-1c, 4.6-1q, and 4.6-3 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.6-5: Introduce or spread an invasive non-native species during construction.

a. Impact: Project construction activities could contribute to the spread of invasive plants and/or introduce new invasive plants to the Project area or adjacent lands with native plant communities through earth moving, transport of vehicles, equipment and materials, and unanticipated sediment dispersal during rain events, which would be a significant impact.

b. Mitigation: See Impact 4.6-1, above, for a description of Mitigation Measures 4.6-1a and 4.6-1p.

c. Findings: Implementation of Mitigation Measures 4.6-1a and 4.6-1p would reduce impacts to less than significant by designating a lead biologist to oversee and ensure implementation of special-status species and sensitive natural community protective measures and requiring implementation of measures, such as cleaning tools and equipment, to reduce the introduction or spread of invasive species. The CPUC has

imposed Mitigation Measures 4.6-1a and 4.6-1p on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.6-6: Result in substantial adverse effects on candidate, sensitive, or special-status species during project operations.

a. Impact: Periodic maintenance of the subsurface slant wells (approximately once every 5 years) would result in approximately 1 to 2 acres of ground disturbance in the CEMEX active mining area. Several special-status species have potential to occur within central dune scrub in the immediate vicinity of the subsurface slant wells. Disturbance in this area may preclude western snowy plovers from nesting in this location in the future. Therefore, this would be a permanent loss of up to 2 acres of western snowy plover habitat, which includes a mix of relatively undisturbed central dune scrub, formerly disturbed sand dunes that are revegetating with native and non-native dune scrub vegetation, and unvegetated disturbed sandy soil in actively mined areas, which would be a significant impact (in addition to the 1 acre of permanent loss identified in Impact 4.6-1). Maintenance activities have potential to impact up to approximately 1.6 acre of Smith's blue butterfly habitat, which would be a significant impact.

   The salinity of the brine in the Project brine storage basin is expected to range between 57 and 58 parts per thousand (ppt; Flow Science, Inc., 2014). Waterfowl using the brine storage basin over long periods of time could become sick or die from salt toxicosis. Although it is unlikely that many birds would become sick or die at the brine storage basin annually, over the life of the Project, some migratory waterfowl could become sick or die from use of the brine storage basin, which is a significant impact.

   Minimal nighttime lighting would be used at the Carmel Valley Pump Station for security. As the Carmel Valley Pump Station is located in the vicinity of the Carmel River riparian corridor, which provides habitat for migratory birds and bats, the new lighting would introduce a new source of substantial light to the area that could impact migratory birds or bats by causing them to abandon their nests or roosts, which is a significant impact.

   Noise from upgraded pumps at the Main System-Hidden Hills Interconnection Improvements would substantially increase noise levels. Substantial increases in the ambient noise level could adversely affect special-status wildlife within 50 feet of the booster stations, which would be a significant impact.

b. Mitigation: See Impact 4.6-1, above, for a description of Mitigation Measures 4.6-1a through 4.6-1g, 4.6-1i, 4.6-1n, and 4.6-1p.

   In accordance with Mitigation Measure 4.6-6, Bird deterrents (such as reflective flagging, whistles, or a falconer) shall be utilized at the Brine Storage Basin. The type of bird deterrent shall be determined by the lead biologist and shall be modified if, through monitoring, the bird deterrents are either not sufficient at deterring birds from the Brine Storage Basin or pose a risk to wildlife.

   See Impact 4.12-1 in Section 4.12, Noise and Vibration, below, for a description of Mitigation Measure 4.12-1b.

See Impact 4.12-5 in Section 4.12, Noise and Vibration, below, for a description of Mitigation Measure 4.12-5.

See Impact 4.14-2 in Section 4.14, Aesthetic Resources, below, for a description of Mitigation Measure 4.14-2.

c. Findings: Implementation of Mitigation Measures 4.6-1a through 4.6-1g, 4.6-1i, 4.6-1n, 4.6-1p, 4.6-6, 4.12-5, and 4.14-2 would reduce impacts on special-status species from Project operations to a less-than-significant level by designating a lead biologist to oversee and ensure implementation of special-status species protective measures; requiring worker training regarding special-status species potentially present to ensure that workers are aware of special-status species that occur in the Project area and the measures to be implemented to avoid, minimize, and/or mitigate impacts; requiring general measures such as installation of an exclusion fencing to ensure special-status species do not occur within the construction area, a trash abatement program to ensure special-status species predators are not attracted to the site, and other measures to avoid and minimize impacts on special-status species; requiring specific measures to avoid, minimize, and compensate for impacts on the western snowy plover such as avoiding the breeding season, installing a visual construction barrier for work conducted adjacent to breeding habitat during the breeding season to reduce human disturbance to plovers, conducting pre-construction surveys to determine if plovers are present and implementing minimization measures to minimize construction impacts on plovers, if present, and compensating for habitat loss to mitigate for temporary and permanent loss of habitat; requiring specific measures to avoid and minimize impacts on special-status plants such as avoiding individual plants to the extent feasible and compensating for temporary or permanent loss of special-status plants at a level acceptable to the applicable resource agencies; requiring specific measures to avoid and minimize impacts on Smith's blue butterfly such as avoiding host plants to the extent feasible to avoid impacts to individuals, relocating host plants, duff, and/or soil that cannot be avoided, and providing compensatory mitigation for permanent impacts; requiring specific measures to avoid and minimize impacts on black legless lizard, silvery legless lizard, and coast horned lizard such as relocating individuals to areas outside of the construction area to avoid injury or mortality from construction; requiring specific measures to avoid and minimize impacts on nesting birds such as limiting construction to the non-nesting season when feasible to avoid impacts to active nests and requiring a no-disturbance buffer around active nests if work is scheduled during the nesting season; developing and implementing a mitigation and monitoring plan for temporarily and permanently impacted sensitive habitats to ensure that temporary and permanent losses are fully compensated as required; requiring implementation of measures to reduce the introduction or spread of invasive species that may degrade habitat for special-status species such as cleaning tools and equipment before entering and leaving worksites, avoiding driving or operating equipment in weed-infested areas, and covering non-active stockpiles; discouraging migratory waterfowl from using the Brine Storage Basin via reflective flagging, whistles, or a falconer; requiring implementation of noise controls for construction equipment to reduce noise impacts on special-status wildlife species; ensuring that noise levels are maintained no greater than 5 dBA above existing monitored ambient values to reduce noise impacts on special-status wildlife species; and requiring use of low-intensity lighting and that light be shielded or directed downward to prevent light spillage into adjoining areas where special-status wildlife species may occur. The CPUC has imposed Mitigation Measures 4.6-1a through 4.6-

1g, 4.6-1i, 4.6-1n, 4.6-1p, 4.6-6, 4.12-5, and 4.14-2 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.6-7: Result in substantial adverse effects on riparian habitat, critical habitat, or other sensitive natural communities during project operations.

a. Impact: Maintenance of the slant wells would be required approximately every 5 years and would disturb a total of 1 to 2 acres of central dune scrub and areas that are currently actively disturbed for sand mining activities. This disturbance area includes relatively undisturbed central dune scrub, formerly disturbed sand dunes that are revegetating with native and non-native dune scrub vegetation, and unvegetated disturbed sandy soil areas. Disturbance every 5 years would keep these sites in a permanent state of recovery from disturbance and dune scrub vegetation would not be allowed to mature, which would be a significant impact. The site is in the coastal zone and the entire maintenance area would likely be considered primary habitat under the City of Marina LCLUP and ESHA by the CCC. Impacts to central dune scrub and primary habitat/ESHA would be potentially significant.

   Slant well maintenance at well Site 1 could indirectly impact western snowy plover critical habitat if worker foot traffic extends beyond the designated construction work area, if trash and debris is left behind following construction, and/or if invasive plant species are introduced or spread at the site. Indirect impacts on critical habitat would be significant.

b. Mitigation: See Impact 4.6-1, above for a description of Mitigation Measures 4.6-1a through 4.6-1d, 4.6-1n, and 4.6-1p.

   See Impact 4.6-2, above, for a description of Mitigation Measures 4.6-2a and 4.6-2b.

c. Findings: Implementation of Mitigation Measures 4.6-1a through 4.6-1d, 4.6-1n, 4.6-1p, 4.6-2a, and 4.6-2b would reduce impacts on sensitive natural communities, critical habitat and ESHA to a less-than-significant level by designating a lead biologist to oversee and ensure implementation of sensitive natural community protective measures; requiring worker training regarding sensitive natural communities potentially present to ensure that workers are aware of sensitive natural communities that occur in the project area and the measures to be implemented to avoid, minimize, and/or mitigate impacts; requiring general measures such as staking or flagging the construction area to ensure work is restricted to the construction footprint and avoids adjacent sensitive natural communities and other measures to avoid and minimize impacts on sensitive natural communities; requiring specific measures to avoid, minimize, and compensate for impacts on the western snowy plover such as avoiding the breeding season, installing a visual construction barrier for work conducted adjacent to breeding habitat during the breeding season to reduce human disturbance to plovers, conducting pre-construction surveys to determine if plovers are present and implementing minimization measures to minimize construction impacts on plovers, if present, and compensating for habitat loss to mitigate for temporary and permanent loss of habitat; requiring specific measures to avoid and minimize impacts on special-status plants such as avoiding individual plants to the extent feasible and compensating for temporary or permanent loss of special-status plants at a level acceptable to the applicable resource agencies; requiring implementation of measures to reduce the introduction or spread of

invasive species that may degrade sensitive habitat such as cleaning tools and equipment before entering and leaving worksites, avoiding driving or operating equipment in weed-infested areas, and covering non-active stockpiles; ensuring the Project conforms to ESHA policies; and requiring measures to avoid and minimize impacts on sensitive natural communities such as requiring that staging areas are located away from sensitive communities to minimize Project impacts to these resources and compensating for loss of habitat. The CPUC has imposed Mitigation Measures 4.6-1a through 4.6-1d, 4.6-1n, 4.6-1p, 4.6-2a, and 4.6-2b on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.6-8: Result in substantial adverse effects on federal wetlands, federal other waters, and waters of the State during project operations.

a. Impact: Maintenance activities of the subsurface slant wells would not occur in potential waters of the U.S./waters of the state. However, the CEMEX settling ponds, potentially waters of the U.S./waters of the state, are located approximately 50 feet from the slant well Site 1. Due to proximity, construction crews could inadvertently impact wetlands by walking or driving through them during maintenance, which would be a significant impact.

b. Mitigation: See Impact 4.6-1, above, for a description of Mitigation Measures 4.6-1a through 4.6-1c.

c. Findings: Implementation of Mitigation Measures 4.6-1a through 4.6-1c would reduce impacts on waters of the U.S. and/or waters of the state to a less-than-significant level by designating a lead biologist to oversee and ensure implementation of jurisdictional waters protective measures; requiring worker training regarding jurisdictional waters potentially present to ensure that workers are aware of jurisdictional waters that occur in the Project area and the measures to be implemented to avoid, minimize, and/or mitigate impacts; requiring general measures such as staking or flagging the construction area to ensure work is restricted to the construction footprint and avoids adjacent jurisdictional waters and other measures to avoid and minimize impacts on jurisdictional waters. The CPUC has imposed Mitigation Measures 4.6-1a through 4.6-1c on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.6-9: Introduce or spread an invasive non-native species during Project operations.

a. Impact: Periodic maintenance activities at the subsurface slant wells would include ground disturbance, which could contribute to the spread of invasive plants and/or introduce new invasive plants to the project area or adjacent lands with native plant communities through earth moving, transport of vehicles, equipment and materials, and unanticipated sediment dispersal during rain events, which would be a significant impact.

b. Mitigation: See Impact 4.6-1, above, for a description of Mitigation Measures 4.6-1a and 4.6-1p.

c. Findings: Implementation of Mitigation Measures 4.6-1a and 4.6-1p would reduce impacts from the introduction or spread of invasive species to a less than significant

level by designating a lead biologist to oversee and ensure implementation of special-status species and sensitive natural community protective measures and requiring implementation of measures, such as cleaning tools and equipment, to reduce the introduction or spread of invasive species. The CPUC has imposed Mitigation Measures 4.6-1a and 4.6-1p on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.6-10: Be inconsistent with the provisions of an adopted Habitat Conservation Plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan during construction or operations.

a. Impact: The new Transmission Main would pass through the HMP's Caltrans State Route 1 Area within the Development with Reserve Areas or Development with Restrictions category. The management requirements for these parcels specify that in conjunction with any transportation work conducted by Caltrans, Caltrans will restore and enhance native coastal strand, dune scrub, and sand hill maritime chaparral habitats in the road shoulders and medians in areas that will not conflict with anticipated highway expansion, improvements, operations, or maintenance. Even though the HMP only describes the potential for Caltrans transportation in this corridor, for the purpose of this analysis, we assume that the intent of the measure was to ensure that any projects that temporarily disturbed native habitat would restore and enhance these areas following construction. Construction of the new Transmission Main would temporarily impact central dune scrub habitat, which would be inconsistent with the HMP, which is a significant impact.

b. Mitigation: See Impact 4.6-1, above, for a description of Mitigation Measures 4.6-1a and 4.6-1n.

   See Impact 4.6-2, above, for a description of Mitigation Measure 4.6-2b.

c. Findings: Implementation of Mitigation Measures 4.6-1a, 4.6-1n, and 4.6-2b would ensure that the Project is not inconsistent with the provisions of an adopted Habitat Conservation Plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan and would reduce potential impacts to a less-than-significant level. These measures would reduce impacts by designating a lead biologist to oversee and ensure implementation of special-status species and sensitive natural community protective measures; developing and implementing a mitigation and monitoring plan for temporarily and permanently impacted sensitive habitats to ensure that temporary and permanent losses are fully compensated as required; and requiring measures to minimize and/or mitigate impacts on sensitive natural communities such as restoration of temporarily impacted sensitive communities, to ensure no net loss of habitat; and ensuring that measures that may be required to be implemented as part of the HMP are implemented for the proposed project. The CPUC has imposed Mitigation Measures 4.6-1a, 4.6-1n, and 4.6-2b on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

4.7 Hazards and Hazardous Materials

Impact 4.7-2: Encountering hazardous materials from other hazardous materials release sites during construction.

a. Impact: The Project involves excavation, trenching, and grading for the construction of water conveyance pipelines, building footings, and utilities. Some sites with known soil and/or groundwater contamination are located within 0.25 mile of Project facilities and may have affected subsurface conditions at various locations along the Project area. In addition, although previous site cleanup activities have remediated known contamination at some sites, it is still possible that undiscovered contamination may be present, given the land use history in the Project area. Soil disturbance during construction could further disperse existing contamination into the environment and expose construction workers and the public to contaminants. If substantial hazardous materials are present in excavated soils, health and safety risks to workers and the public could occur. Such risks could occur from stockpiling, handling, or transportation of soils that have been contaminated by hazardous materials from previous spills or leaks. The dewatering of contaminated groundwater could also present risks to public health and safety, and the environment, if the contaminated groundwater (i.e., dewatering effluent) is not handled properly. The potential for contaminated soil and groundwater to be released into the environment during Project construction would be considered a significant impact.

b. Mitigation: In accordance with Mitigation Measure 4.7-2a, the construction contractor shall prepare and implement a site-specific Health and Safety Plan as required by and in accordance with 29 CFR 1910.120 to protect construction workers and the public during all excavation and grading activities. This plan shall be submitted to the CPUC for review prior to commencement of construction. The plan shall designate a site safety and health supervisor, include a summary of all potential risks to construction workers, specify personal protective equipment and decontamination procedures, include emergency procedures, and procedures to be followed in the case of potential soil or groundwater contamination.

   In accordance with Mitigation Measure 4.7-2b, CalAm or its contractor will develop a groundwater dewatering control and disposal plan specifying how contaminated groundwater (dewatering effluent), if encountered, will be handled and disposed of in a safe, appropriate and lawful manner. The plan must identify the locations at which groundwater dewatering is likely to be required, the method to analyze groundwater for hazardous materials, and the appropriate treatment and/or disposal methods. If the dewatering effluent contains contaminants that exceed the requirements of the *General WDRs for Discharges with a Low Threat to Water Quality* (Order No. R3-2011-0223, NPDES Permit No. CAG993001), the construction contractor will contain the dewatering effluent in a portable holding tank for appropriate offsite disposal or discharge. The contractor can either dispose of the contaminated effluent at a permitted waste management facility or discharge the effluent, under permit, to a publicly owned treatment works such as the MRWPCA Regional Wastewater Treatment Plant.

c. Findings: Implementation of Mitigation Measures 4.7-2a and 4.7-2b will reduce Impact 4.7-2 to a less-than-significant level by requiring that construction contractors prepare a health and safety plan in accordance with Cal OSHA regulations and

requiring construction contractors to comply with all relevant environmental regulations and plan appropriately for the safe and lawful handling and disposal of excavated soil and groundwater, when encountered. The CPUC has imposed Mitigation Measures 4.7-2a and 4.7-2b on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.7-C: Cumulative impacts related to Hazards and Hazardous Materials.

a. Impact: The Project would result in a significant impact resulting from the potential release of or exposure to hazardous materials in soil or groundwater that could have a significant contribution to a potentially significant cumulative impact resulting from such releases from more than one project.

b. Mitigation: See Impact 4.7-2, above, for a description of Mitigation Measures 4.7-2a and 4.7-2b.

c. Findings: Implementation of Mitigation Measures 4.7-2a and 4.7-2b would reduce significant cumulative impacts associated with the release of hazardous materials during construction to a less-than-significant level by requiring that construction contractors prepare a health and safety plan in accordance with Cal OSHA regulations that protects workers and the public by outlining potential risks, required personal protective equipment, decontamination procedures, and emergency procedures and by requiring construction contractors to comply with all relevant environmental regulations and plan appropriately for the safe and lawful handling and disposal of excavated soil and groundwater, when encountered. The CPUC has imposed Mitigation Measures 4.7-2a and 4.7-2b on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

4.8 Land Use, Land Use Planning, and Recreation

Impact 4.8-2: Disrupt or preclude public access to or along the coast during construction.

a. Impact: Construction of the new Transmission Main would impede access to vertical and lateral public accessways within Fort Ord Dunes State Park. Pipeline construction activities would progress at a rate of 150 to 250 feet per day. Construction-period impacts at park entrances would typically be limited to a period of one or two weeks. Temporary closures of these entrances would affect access into the Park at specific locations.

b. Mitigation: See Impact 4.9-1 in Section 4.9, Traffic and Transportation, below, for a description of Mitigation Measure 4.9-1.

c. Findings: Implementation of Mitigation Measure 4.9-1 would reduce Impact 4.8-2 to a less-than significant level by ensuring that recreational users of Fort Ord Dunes State Park would be informed of the location and duration of construction activities that could cause temporary closures of accessways, and be provided with detour routes for other accessways that would be accessible during construction. The CPUC has imposed Mitigation Measure 4.9-1 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.8-C: Cumulative impacts related to Land Use, Land Use Planning, and Recreation.

a. Impact: Project construction would temporarily obstruct specific Fort Ord Dunes State Parks entry points, and thus disrupt public access to existing vertical and lateral coastal accessways within the park. The Fort Ord Dunes Campground project is the only cumulative project whose effects could combine with those of the Project to further impact coastal public access within the park. The implementation schedule remains unknown. However, if the two projects were constructed at the same time or in sequence, the duration of disruption to Beach Range Road access and the Divarty Street/1st Street access points could be extended. The impacts of the Project would be temporary, limited to the construction phase, and affected areas would thereafter be returned to their approximate pre-construction condition. During the construction period, alternative access entry points into the park would remain open, and vertical and lateral access within the park would not be impacted; however, the cumulative impact resulting from more than one project affecting coastal public access would be significant.

b. Mitigation: See Impact 4.9-1 in Section 4.9, Traffic and Transportation, below, for a description of Mitigation Measure 4.9-1.

c. Findings: Implementation of Mitigation Measure 4.9-1 would reduce the significant cumulative impact associated with coastal public access during construction to a less-than-significant level by requiring that signage be posted in advance of and during construction to notify bicyclists and pedestrians of construction activity and advise them about detour routes and construction schedules. The CPUC has imposed Mitigation Measure 4.9-1 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

4.9 Traffic and Transportation

Impact 4.9-1: Temporary traffic increases on regional and local roadways due to construction-related vehicle trips.

a. Impact: Project-related construction activities would result in a temporary increase in traffic from construction workers and trucks traveling to and from the construction work areas. Although the estimated maximum increase in traffic along regional roadways would remain within the carrying capacities of the regional roadways and would not substantially affect traffic flow, construction-related traffic increases along local and neighborhood (residential) streets could result in adverse traffic conditions. This would be a potentially significant impact.

b. Mitigation: In accordance with Mitigation Measure 4.9-1, CalAm and/or its construction contractor shall obtain and comply with all necessary encroachment permits prior to construction. A traffic engineer shall prepare a traffic control and safety assurance plan that includes measures that would provide for continuity of vehicular, pedestrian, and bicyclist traffic; reduce the potential for traffic accidents; and ensure worker safety in construction zones. Where Project construction activities could disrupt mobility and access for bicyclists and pedestrians, the plan shall include measures to ensure that safe and convenient access, including recreation and coastal, would be maintained. The plan shall include circulation and detour plans to minimize impacts on local streets; installation of traffic control devices where warranted;

scheduling truck trips outside of peak morning and evening commute hours to minimize adverse impacts on traffic flow; posting detour signs along affected roadways to notify motorists of alternative routes; providing safe detours to reroute affected bicycle/pedestrian traffic; posting signage along all potentially affected recreational trails and coastal access points; Class I, II, and II bicycle routes; and pedestrian pathways, including the Monterey Peninsula Recreational Trail, to warn bicyclists and pedestrians of construction activities; scheduling construction activities to minimize impacts during heavy recreational use periods; implementing a public information program to notify motorists, bicyclists, nearby residents, and adjacent businesses of the impending construction activities; storing all equipment and materials in designated contractor staging areas; maintaining alternate one-way traffic flow past the construction zone where possible; limiting lane closures during peak hours; restoring roads and streets to normal operation by covering trenches with steel plates; providing warning signs and speed control devices to achieve required speed reductions for safe traffic flow through the work zone; maintaining access for emergency vehicles at all times; coordinate with police and fire stations, transit stations, hospitals, and schools and provide advance notification to local police, fire, and emergency service providers of the timing, location, and duration of construction activities that could affect the movement of emergency vehicles on area roadways; developing a school traffic and pedestrian safety plan to minimize adverse impacts associated with truck trips and lane closures; avoiding truck trips through designated school zones during the school drop-off and pickup hours; provide flaggers in school areas at street crossings to manage traffic flow and maintain traffic safety during the school drop-off and pickup hours on days when pipeline installation would occur in designated school zones; and coordinating with Monterey-Salinas Transit so the transit provider can temporarily relocate bus stops in work zones as deemed necessary.

c. Findings: Implementation of Mitigation Measure 4.9-1 would reduce traffic impacts to regional and local roadways during construction to a less-than-significant level by requiring that CalAm or its contractors develop project-specific circulation and detour plans to reduce traffic congestion. The CPUC has imposed Mitigation Measure 4.9-1 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.9-2: Temporary reduction in roadway capacities and increased traffic delays during construction.

a. Impact: The Project would include installation of approximately 21 miles of new pipelines. Pipeline installation would generally be accomplished using conventional open-trench methods. Depending on the final pipeline alignments, where construction would occur in vehicle travel lanes or the adjacent road shoulder, temporary lane closures and/or detours could be needed to accommodate the construction zone. All pipelines could require construction within or adjacent to vehicle travel lanes and could require temporary lane closures and/or detours. Impacts on roadway capacities and traffic flow related to pipeline installation are considered to be potentially significant for all proposed pipelines.

b. Mitigation: See Impact 4.9-1, above, for a description of Mitigation Measure 4.9-1.

c. Findings: Implementation of Mitigation Measure 4.9-1 would reduce Impact 4.9-2 to a less-than-significant level by creating a traffic control plan that would include measures to minimize adverse effects of roadway construction and detours, thereby relieving temporary conflicts with reduced road capacity or increased traffic delays during construction. The CPUC has imposed Mitigation Measure 4.9-1 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.9-3: Increased traffic safety hazards for vehicles, bicyclists, and pedestrians on public roadways during construction.

a. Impact: Construction vehicles travelling to and from the Project area would share the roadways with other vehicles, and during construction bicyclists and pedestrians could be required to enter the adjacent road shoulder or use other temporary detours to circumvent construction work areas. Potential increases in traffic safety hazards during project construction would be a potentially significant impact.

b. Mitigation: See Impact 4.9-1, above, for a description of Mitigation Measure 4.9-1.

c. Findings: Implementation of Mitigation Measure 4.9-1 would reduce Impact 4.9-3 to a less-than-significant level by creating a traffic control plan that would include measures to minimize safety hazards for vehicles, bicyclists, and pedestrians during temporary construction activities along roadways, pedestrian pathways, recreation trails, and bicycle routes. The CPUC has imposed Mitigation Measure 4.9-1 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.9-4: Impaired emergency access during construction.

a. Impact: Pipeline installation activities could require construction within vehicle travel lanes and road shoulders. Temporary reductions in travel lanes and roadway capacity to accommodate the construction work areas could result in delays for emergency vehicles. Trenching and paving along roadways during pipeline installation could also disrupt emergency vehicle access to adjacent land uses. This impact is a potentially significant impact.

b. Mitigation: See Impact 4.9-1, above, for a description of Mitigation Measure 4.9-1.

c. Findings: Implementation of Mitigation Measure 4.9-1 would reduce Impact 4.9-4 to a less-than-significant level by creating a traffic control plan that would include measures to maintain access for emergency vehicles at all times during construction and to coordinate with and provide advance notification to local emergency responders regarding the timing, location, and duration of construction activities that could affect the movement of emergency vehicles on area roadways. The CPUC has imposed Mitigation Measure 4.9-1 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.9-5: Temporary disruptions to public transportation, bicycle, and pedestrian facilities during construction.

a. Impact: Construction activities within or adjacent to vehicle travel lanes could disrupt access to bus stops operated by Monterey-Salinas Transit, require that bus stops be temporarily relocated, and/or conflict with bicycle traffic along roads with designated bike lanes. Pipeline installation activities along the Monterey Peninsula Recreational Trail could conflict with bicycle and pedestrian traffic. Construction-related impacts on alternative transportation modes and facilities during pipeline installation activities would be potentially significant.

b. Mitigation: See Impact 4.9-1, above, for a description of Mitigation Measure 4.9-1.

c. Findings: Implementation of Mitigation Measure 4.9-1 would reduce Impact 4.9-5 to a less-than-significant level by creating a traffic control plan that would include measures to minimize adverse impacts to public transportation, bicycle, and pedestrian facilities during construction by providing safe access and detours for affected bicycle and pedestrian traffic; scheduling construction to minimize impacts to recreational facilities; creating a public information program that would notify the public about impending construction activities; and coordinating with the MST to provide temporary relocation of bus stops in work zones. The CPUC has imposed Mitigation Measure 4.9-1 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.9-6: Increased wear-and-tear on the designated haul routes used by construction vehicles.

a. Impact: The use of trucks to transport equipment and material to and from the construction work areas could affect road conditions on the designated haul routes by increasing the rate of road wear. The degree to which this impact would occur depends on the roadway design (pavement type and thickness) and the existing condition of the road. Some of the smaller roadways and residential streets may not have been constructed to support use by heavy construction trucks and vehicles, and Project-related increases in construction truck trips could cause excessive wear-and-tear on these roadways, which is a potentially significant impact.

b. Mitigation: In accordance with Mitigation Measure 4.9-6, prior to commencing project construction, CalAm and the affected jurisdiction(s) shall enter into an agreement detailing the preconstruction condition of all major project-related construction access and haul routes, in addition to any appropriate post-construction roadway rehabilitation requirements (e.g., who would make the roadway repair, and by when). Temporary detour routes may also be included in the inventory of preconstruction road conditions, if appropriate. The construction routes identified in the rehabilitation program must be consistent with those identified in the construction traffic control and safety assurance plan developed under Mitigation Measure 4.9-1. Roads damaged by Project-related construction vehicles shall be repaired to a structural condition equal to that which existed prior to construction activities. CalAm shall be responsible for paying for all repairs needed to fix the damage caused by Project-related construction vehicles.

c. Findings: Implementation of Mitigation Measure 4.9-6 would reduce Impact 4.9-6 to a less-than-significant level by ensuring that roadways and haul routes that are damaged by Project-related construction are repaired to a structural condition equal to that which existed prior to construction activities. The CPUC has imposed Mitigation Measure 4.9-6 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.9-7: Parking interference during construction.

a. Impact: Provision of staging areas in publicly used parking lots would result in potentially significant parking impacts due to temporary increases in parking demand associated with construction worker vehicles and/or temporary displacement of parking spaces in publicly used parking lots for staging areas (off-street).

b. Mitigation: In accordance with Mitigation Measure 4.9-7, prior to commencing Project construction, the construction contractor(s) shall coordinate with the affected jurisdictions (i.e., Monterey County, Cal State Monterey, and the cities of Marina and Seaside), and affected parties (i.e., the Walmart Superstore at 150 Beach Road), to design the staging areas to avoid or minimize parking impacts in the publicly used parking lots.

c. Findings: Implementation of Mitigation Measure 4.9-7 would reduce Impact 4.9-7 to a less-than-significant level by ensuring that publicly used parking lots are either avoided when designing and planning staging areas, or that parking impacts in public parking lots that will be used for staging areas would be minimized. The CPUC has imposed Mitigation Measure 4.9-7 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

4.11 Greenhouse Gas Emissions

Impact 4.11-1: Incremental contribution to climate change from GHG emissions associated with the proposed project.

a. Impact: The sum of the 40-year amortized construction GHG emissions and the total net operation emissions that would be associated with the proposed project is approximately 8,365 metric tons CO2e per year. These emissions would exceed the 2,000 metric tons per year significance threshold; therefore, a significant impact would occur, and the Project would be considered to contribute to the primary and secondary adverse effects of climate change, such as increases in global temperatures, global rise in sea level, ocean acidification, impacts on agriculture, changes in disease vectors, and changes in habitat and biodiversity.

b. Mitigation: In accordance with Mitigation Measure 4.11-1, CalAm shall submit a GHG Emissions Reduction Plan to the CPUC prior to the start of construction activities that details the carbon footprint for all operational components of the approved project. The Plan shall include a summary of energy recovery and conservation technologies and conservation technologies available and shall include a commitment by CalAm to incorporate available feasible energy recovery and conservation technologies. CalAm shall ensure that the approved project's operational electricity use results in net zero GHG emissions using the following loading order, based upon physical and economic feasibility:

i. Onsite (solar photovoltaic panels) or local (landfill-gas-to-energy) renewable energy

ii. Off-site renewable energy within California

iii. Procure and retire Renewable Energy Certificates

iv. Procure and retire Carbon Offsets

CalAm shall calculate the project's GHG emissions from operational electricity usage annually. If the CPUC determines that CalAm failed to achieve net zero GHG emissions for the approved project's operational electricity use for a particular year, then the CPUC shall notify CalAm in writing of the exceedance within 45 days of receipt of the documentation submitted by CalAm under this mitigation measure. The notice shall specify the metric tons of GHG emissions that exceeded the net zero obligation. Within 45 days of receipt of this notice, CalAm shall procure and retire Carbon Offsets in an amount at least equivalent to the exceedance, and will submit documentation to the CPUC demonstrating this procurement and retirement.

See Impact 4.18-1 in Section 4.18, Energy Conservation, below, for a description of Mitigation Measure 4.18-1.

c. Findings: Implementation of Mitigation Measures 4.11-1 and 4.18-1 would reduce Impact 4.11-1 to a less-than-significant level by requiring a GHG Emissions Reduction Plan that would include energy recovery and conservation measures that would ensure that the Project's operational electricity use results in net zero GHG emissions, and by requiring a Construction Equipment Efficiency Plan that includes mandatory energy reduction measures. The CPUC has imposed Mitigation Measures 4.11-1 and 4.18-1 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.11-2: Conflict with the Executive Order B-30-15 Emissions Reduction Goal.

a. Impact: GHG emissions associated with the proposed project would exceed the emissions significance threshold, which indicates that implementation of the project would not be consistent with the GHG emission reduction goals for year 2030 identified in Executive Order B-30-15. Therefore, the proposed project would conflict with Executive Order B-30-15 and would result in a potentially significant impact.

b. Mitigation: See Impact 4.11-1, above, for a description of Mitigation Measure 4.11-1.

See Impact 4.18-1 in Section 4.18, Energy Conservation, below, for a description of Mitigation Measure 4.18-1.

c. Findings: Implementation of Mitigation Measures 4.11-1 and 4.18-1 would reduce Impact 4.11-1 to a less-than-significant level by requiring a GHG Emissions Reduction Plan that would include energy recovery and conservation measures that would ensure that the Project's operational electricity use results in net zero GHG emissions, and by requiring a Construction Equipment Efficiency Plan that includes mandatory energy reduction measures. These measures would ensure that the Project meets the conditions of EO B-30-15. The CPUC has imposed Mitigation Measures

4.11-1 and 4.18-1 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.11-3: Conflict with AB 32 Climate Change Scoping Plan.

a. Impact: Via AB 32 Scoping Plan Measure W-3, Water System Energy Efficiency, the California Air Resources Board has set a 20 percent electricity use reduction target from 2006 levels. Although the Desalination Plant designs already include state of the art energy recovery and energy efficient features in place of standard energy saving systems, there may be additional feasible energy reducing features available to further reduce the electrical consumption associated with the project.

b. Mitigation: See Impact 4.11-1, above, for a description of Mitigation Measure 4.11-1.

c. Findings: Implementation of Mitigation Measure 4.11-1 will reduce Impact 4.11-3 to a less-than-significant level by ensuring that the proposed project is operated in an energy-efficient manner to the extent feasible. Although the CPUC cannot substantiate that the proposed project's electricity use would be reduced by 20 percent, pursuant to implementation of Mitigation Measure 4.11-1, the electricity that would supply the project would be generated from renewable energy sources, and/or would otherwise be offset through the procurement of Renewable Energy Certificates and/or retirement of Carbon Offsets. The CPUC has imposed Mitigation Measures 4.11-1 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.11-C: Cumulative impacts related to greenhouse gas emissions.

a. Impact: Because GHG emissions have global climate change implications, the evaluation of GHG emissions impacts is inherently a cumulative impact analysis. Project construction and operations would result in GHG emissions greater than 2,000 metric tons CO2e per year, conflict with Executive Order B-30-15 Emissions Reduction Goal, and conflict with AB 32 Scoping Plan Measures; therefore, the MPWSP would not be considered consistent with the State's GHG reduction goals and the associated impact would have a cumulatively considerable contribution to such a cumulative impact.

b. Mitigation: See Impact 4.11-1, above, for a description of Mitigation Measure 4.11-1.

   See Impact 4.18-1 in Section 4.18, Energy Conservation, below, for a description of Mitigation Measure 4.18-1.

c. Findings: Implementation of Mitigation Measures 4.11-1 and 4.18-1 would reduce the Project's contribution to a cumulative impact to a less-than-significant level by requiring a GHG Emissions Reduction Plan that would include energy recovery and conservation measures that would ensure that the Project's operational electricity use results in net zero GHG emissions, and by requiring a Construction Equipment Efficiency Plan that includes mandatory energy reduction measures. The CPUC has imposed Mitigation Measures 4.11-1 and 4.18-1 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

4.12 Noise and Vibration

Impact 4.12-2: Expose people to or generate noise levels in excess of standards established in the local general plan, noise ordinance, or applicable standards of other agencies during construction.

a. Impact: Construction of the new Desalinated Water Pipeline, Castroville Pipeline, new Transmission Main, ASR Conveyance Pipeline, ASR Recirculation Pipeline, and ASR Pump-to-Waste Pipeline would generate noise levels in excess of local noise level standards. The new Desalinated Water Pipeline and new Transmission Main would exceed the City of Marina's 60-dBA noise level standard for construction noise, a significant impact. In the absence of Project-specific information regarding noise-reduction measures that would be implemented during Project construction, it is conservatively assumed that noise resulting from construction of ASR Conveyance Pipeline, ASR Recirculation Pipeline, and ASR Pump-to-Waste Pipeline would violate Noise Policy B-9 of the Fort Ord Reuse Plan, a significant impact.

b. Mitigation: In accordance with Mitigation Measure 4.12-1b, the constructor contractor(s) shall ensure that construction equipment with internal combustion engines have sound control devices at least as effective as those provided by the original manufacturer. Impact tools shall be hydraulically or electrically powered, when possible, to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler shall be placed on the compressed air exhaust to lower noise levels by up to approximately 10 dBA. External jackets shall be used on impact tools, where feasible, in order to achieve a further reduction of 5 dBA. The construction contractor(s) shall locate staging areas and stationary noise sources as far from nearby receptors as possible, and shall muffle and enclose them in temporary sheds, incorporate noise barriers, or implement other noise control measures to the extent feasible.

   In accordance with Mitigation Measure 4.12-1c, CalAm shall submit a Noise Control Plan for all nighttime pipeline work to the CPUC for review and approval prior to the commencement of project construction activities. The Noise Control Plan shall identify all feasible noise control procedures to be implemented during nighttime pipeline installation in order to reduce noise levels to the extent practicable at the nearest residential or noise sensitive receptor. At a minimum, the Noise Control Plan shall require use of moveable noise screens, noise blankets, or other suitable sound attenuation devices be used to reduce noise levels during nighttime pipeline installation activities below 60 dBA L_{eq}.

c. Findings: Implementation of Mitigation Measures 4.12-1b and 4.12-1c would reduce Impact 4.12-2 to a less-than-significant level by requiring that construction contractors implement noise control measures, including temporary sound enclosures, if necessary, to reduce the resultant daytime and nighttime noise levels below 60 dBA; by providing 15 dBA of sound attenuation, which would be sufficient to reduce the impact of sheet pile driving to less than the 85 dBA threshold of the Monterey County Code; by ensuring that construction activities would be consistent with Monterey County General Plan Policy S-7.9 and local plans; and by reducing construction noise levels to comply with Noise Policy B-9 of the Fort Ord Reuse Plan. The CPUC has imposed Mitigation Measures 4.12-1b and 4.12-1c on the

Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.12-3: Exposure of people to or generation of excessive groundborne vibration during construction.

a. Impact: Trenchless construction methods required for construction of the new Desalinated Water Pipeline and new Transmission Main would generate vibration levels above the 0.3 in/sec PPV structural damage threshold at modern buildings if it were to occur within 45 feet of such a structure. Such a condition would only potentially occur at the southern terminus of Marina Drive in the City of Marina where the entry pit would be approximately 45 feet from an existing residential structure, resulting in a vibration level would be 0.27 in/sec PPV. These vibration levels would meet the "strongly perceptible" threshold of 0.1 in/sec PPV, at a distance of 85 feet from sensitive land uses, resulting in a significant impact related to human annoyance, particularly if these operations were to occur during nighttime hours. This would be a significant impact.

b. Mitigation: In accordance with Mitigation Measure 4.12-3, construction practices shall be utilized at the closest sensitive land uses that do not generate vibration levels above 0.1 in/sec PPV by ensuring that vibration monitoring be conducted for the first 500 feet of pipeline construction for each segment to confirm vibration levels do not exceed the above vibration threshold. If vibration levels exceed the limits of this mitigation measure, construction practices shall be modified to use smaller types of construction equipment or excavator-mounted compaction wheels, operate the equipment in a manner to reduce vibration, or use alternate construction methods, (such as use of manual shoring jacks), and monitoring shall continue for an additional 200 feet or until construction practices meet the required vibration levels. Smaller vibratory rollers shall be used to minimize vibration levels during repaving activities where needed to meet vibration limits. Sheet pile driving for trenchless pipeline installation shall be conducted during daytime hours and access pits shall be located greater than 45 feet from standard structures and 80 feet from historic resources.

c. Findings: Implementation of Mitigation Measure 4.12-3 would reduce Impact 4.12-3 to a less-than-significant level by requiring vibration monitoring during pipeline installation, restricting the location of sheet piles, and restricting pile driving to daytime hours in order to reduce vibration levels below structural damage and human annoyance thresholds. The CPUC has imposed Mitigation Measure 4.12-3 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.12-4: Consistency with the construction time limits established by the local jurisdictions.

a. Impact: Portions of the new Desalinated Water Pipeline and the new Transmission Main would be constructed within the City of Marina and within 100 feet of residential uses. The City of Marina's noise ordinance time limits prohibit nighttime construction work if it would be adjacent to residential uses, but does not specify a distance that defines the term adjacent. Conservatively, open trench pipeline construction that would occur within 500 feet of a residence or lodging facility would

exceed 60 dBA and result in a significant impact and is considered to be inconsistent with the noise ordinance.

b. Mitigation: In accordance with Mitigation Measure 4.12-4, open trench pipeline construction work within 500 feet to residential uses or transient lodging shall be restricted to the hours of 7:00 a.m. to 7:00 p.m. (standard time) Monday through Saturday, and 10:00 a.m. to 7:00 p.m. (standard time) on Sundays and holidays. During daylight savings time, construction hours may be extended to 8:00 p.m.

c. Findings: Implementation of Mitigation Measure 4.12-4 would reduce Impact 4.12-4 to a less-than-significant level by ensuring that open trench pipeline construction is conducted in accordance with the City of Marina's construction noise ordinance. The CPUC has imposed Mitigation Measure 4.12-4 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.12-5: Substantial permanent increases in ambient noise levels in the Project vicinity above levels existing without the Project during operations.

a. Impact: Operation of the ASR-5 and ASR-6 Wells and the booster stations that would be upgraded by the Main System-Hidden Hills Interconnection Improvements would generate noise levels above the 5-dBA threshold. This would be a significant permanent noise increase over existing conditions.

b. Mitigation: In accordance with Mitigation Measure 4.12-5, an acoustical engineer shall design stationary-source noise controls and ensure the applicable noise standards are met. At a minimum, all stationary noise sources (e.g., pump station, emergency generators, variable-frequency-drive motors, well heads with motors) shall be located within enclosed structures and with adequate noise screening, as needed, to maintain noise levels to no greater than 5 dBA above the existing monitored ambient values and 60 CNEL, at the property lines of nearby residences and other noise-sensitive receptors. Once the stationary noise sources have been installed, the contractor(s) shall conduct a single long-term (24-hour) monitoring of noise levels to ensure compliance with local noise standards. CalAm shall submit a compliance monitoring report to the CPUC.

c. Findings: Implementation of Mitigation Measure 4.12-5 would reduce Impact 4.12-5 to a less-than-significant by ensuring that sufficient noise insulation or sound-absorbing material is provided to the pump enclosure to provide additional noise attenuation. The CPUC has imposed Mitigation Measure 4.12-5 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

4.13 Public Services and Utilities

Impact 4.13-1: Disrupt or relocate regional or local utilities during construction.

a. Impact: Construction of the Project could damage or interfere with existing water, sewer, stormwater drainage, natural gas, electric, or communication utility service lines. Construction could require the permanent relocation of these utility lines, potentially interrupting service if the relocation could not be avoided. Accidental rupture of or damage to utility lines during project construction could temporarily

disrupt utility services and, in the case of high-risk utilities, such as high-pressure gas pipelines, could result in significant safety hazards for construction workers. For these reasons, impacts on existing utilities and utility services during Project construction would be potentially significant.

b. Mitigation: In accordance with Mitigation Measure 4.13-1a, before excavation begins, CalAm or its contractor(s) shall locate all overhead and underground utility lines that are reasonably expected to be encountered during excavation. The exact location should be determined and highlighted on all construction drawings.

In accordance with Mitigation Measure 4.13-1b, CalAm or its contractor(s) shall coordinate final construction plans, schedule, and specifications with affected utilities. Arrangements shall be made with these entities regarding the appropriate protection, relocation, or temporary disconnection of services. If any interruption of service is required, CalAm or its contractor(s) shall notify residents and businesses in the project corridor of any planned utility service disruption at least 2 working days and up to 14 calendar days in advance, in conformance with county and state standards.

In accordance with Mitigation Measure 4.13-1c, when any excavation is open, the construction contractor(s) shall protect, support, or remove underground utilities as necessary to safeguard employees. The contractor(s) shall provide weekly updates to CalAm and construction workers regarding the planned excavations for the upcoming week and to specify when construction will occur near a high-priority utility.

In accordance with Mitigation Measure 4.13-1d, before commencement of construction, CalAm or its contractor(s) shall develop an emergency response plan that outlines procedures to follow in the event of a leak or explosion and submit a copy to the CPUC and MBNMS.

In accordance with Mitigation Measure 4.13-1e, CalAm or its contractor(s) shall notify local fire departments in advance of any work that is to be performed within or adjacent to a right-of-way that contains a gas utility line, or any time damage to a gas utility line results in a leak or suspected leak, or whenever damage to any utility results in a threat to public safety.

In accordance with Mitigation Measure 4.13-1f, CalAm or its contractor(s) shall promptly contact utility providers to reconnect any disconnected utility lines as soon as it is safe to do so.

c. Findings: Implementation of Mitigation Measures 4.13-1a through 4.13-1f would reduce Impact 4.13-1 to a less-than-significant level by locating and mapping all utilities in the Project area on construction drawings; coordinating with utilities, fire departments, and customers (if affected) regarding planned excavations and/or planned utility disruptions; regular review of safety measures with employees when working near high-priority utilities; and creation of an emergency response plan which outlines procedures to follow in case of a leak or explosion. The CPUC has imposed Mitigation Measures 4.13-1a through 4.13-1f on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.13-2: Exceed landfill capacity or be out of compliance with federal, state, and local statutes and regulations related to solid waste during construction.

a. Impact: Construction of the Project would generate approximately 25,110 cubic yards (37,665 tons) of excess spoils and construction materials that would require transport out of the project area, such as sand, soil, and asphalt. Failure of CalAm's construction contractor(s) to reuse or recycle excavation materials and other construction waste generated during Project construction would conflict with the County's Integrated Waste Management Plan policies, and could also adversely affect the state-mandated diversion rates of the jurisdictions in which construction activities would be located. This would be a significant impact.

b. Mitigation: In accordance with Mitigation Measure 4.13-2, the construction contractor(s) shall prepare and implement a construction waste reduction and recycling plan identifying the types of debris the project will generate and the manner in which those waste streams will be handled. The plan shall be prepared in coordination with the Monterey Regional Waste Management District and be consistent with the California Integrated Waste Management Act of 1989, and Monterey County's Integrated Waste Management Plan. Upon Project completion, CalAm shall collect the receipts from the contractor(s) and submit them to the CPUC as documentation that the waste reduction, recycling, and diversion goals have been met.

c. Findings: Implementation of Mitigation Measure 4.13-2 would reduce Impact 4.13-2 to a less-than-significant level by ensuring that the waste reduction and recycling plan is developed in coordination with the Monterey Regional Waste Management District, and in accordance with state and local waste reduction and recycling policies. The CPUC has imposed Mitigation Measure 4.13-2 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.13-4: Exceed wastewater treatment requirements of the Central Coast RWQCB, or result in a determination by the wastewater treatment provider that it has inadequate treatment or outfall capacity to serve the project.

a. Impact: Brine generated by the Desalination Plant would be discharged to Monterey Bay through the MRWPCA's existing ocean outfall and diffuser. During certain times of the year, particularly during the non-irrigation (wet) season, the brine stream would be blended with treated wastewater effluent from the MRWPCA Regional Wastewater Treatment Plant prior to discharge. The availability of wastewater effluent for blending with the brine is limited during the dry season (irrigation season) and the brine could be discharged without dilution for extended periods. The *Discharge Requirements for the Monterey Regional Water Pollution Control Agency Treatment Plant* [Order No. R3-2014-0013, NPDES Permit No. CA0048551], which regulate discharges from the outfall, would be amended before the Desalination Plant starts operating to incorporate the "brine only" and combined discharges. Both the "brine only" discharges and the combined discharges would comply with Ocean Plan water quality objectives for all assessed constituents. With implementation of the Project, certain constituent concentrations could become elevated under several assessed discharge scenarios to a level that is close to the Ocean Plan standard. Due to gaps in the available water quality data, a compliance determination could not be

made for ten individual constituents; therefore, it is conservatively assumed that an exceedance of Ocean Plan water quality objectives could occur as a result of operational discharges. This would be a significant impact.

b. Mitigation: See Impacts 4.3-4 and 4.3-5 in Section 4.3, Surface Water Hydrology and Water Quality, above, for a description of Mitigation Measures 4.3-4 and 4.3-5.

c. Findings: Implementation of Mitigation Measures 4.3-4 and 4.3-5 would reduce Impact 4.13-4 to a less-than-significant level by requiring CalAm to conduct water quality assessments prior to Project operation and to implement a comprehensive Monitoring and Reporting Plan that is consistent with the Ocean Plan requirements. The CPUC has imposed Mitigation Measures 4.3-4 and 4.3-5 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.13-5: Increased corrosion of the MRWPCA outfall and diffuser as a result of brine discharge associated with project operations.

a. Impact: The Desalination Plant would generate brine that would be conveyed to a brine mixing facility, and then flow through the land and offshore segments of the MRWPCA outfall and diffuser. The land segment of the outfall and the stainless steel WEKO clamps installed inside the offshore portion of the outfall could be susceptible to chloride corrosion from the brine generated by the Desalination Plant, which would be a significant impact.

   Significant secondary impacts from implementation of Mitigation Measure 4.13-5a include temporary impacts associated with limitations to beach access during high tide due to temporary fencing at the construction locations, greenhouse gas emissions and air quality impacts from the potential use of a 5 kW generator, and potential effects on biological resources from beach disturbance.

   Significant secondary impacts from implementation of Mitigation Measure 4.13-5b could result in possible disturbances to roadways, recreational trails, farmland, ranchland, and terrestrial biological resources. Potential effects on air quality and greenhouse gas emissions could also result.

b. Mitigation: In accordance with Mitigation Measure 4.13-5a, prior to operation of the Desalination Plant, CalAm shall protect the offshore segment of the MRWPCA ocean outfall from corrosion by replacing the existing WEKO seal clamps in the nearshore portion of the ocean outfall with new corrosion-resistant clamps. CalAm shall perform annual inspections of the offshore portion of the outfall and diffuser for the first three years of operation. Thereafter, the offshore portion of the outfall shall be inspected every five years.

   In accordance with Mitigation Measure 4.13-5b, prior to operation of the Desalination Plant, CalAm shall line the land segment of the outfall with a protective liner system.

   Secondary impacts from Mitigation Measure 4.13-5a. See Impact 4.9-1 in Section 4.9, Traffic and Transportation, above, for a description of Mitigation Measure 4.9-1. See Impact 4.10-1 in Section 4.10, Air Quality, for a description of Mitigation

Measures 4.10-1a, 1b, and 1c. See Impact 4.11-1 in Section 4.11, Greenhouse Gas Emissions, above, for a description of Mitigation Measure 4.11-1; See Impact 4.18-1 in Section 4.18, Energy Conservation, above, for a description of Mitigation Measure 4.18-1. See Section 4.6, Terrestrial Biological Resources, above, for a description of Mitigation Measures 4.6-1a through 4.6-1g, 4.6-1i, 4.6-1n, 4.6-1p, 4.6-2a, and 4.6-2b. See Impact 4.12-1 in Section 4.12, Noise and Vibration, for a description of Mitigation Measure 4.12-1b. See Impact 4.14-2 in Section 4.14, Aesthetic Resources, for a description of Mitigation Measure 4.14-2.

Secondary impacts from Mitigation Measure 4.13-5b. See Impacts 4.9-1 and 4.9-6 in Section 4.9, Traffic and Transportation, for a description of Mitigation Measures 4.9-1 and 4.9-6, respectively. See Impact 4.16-1 in Section 4.16, Agricultural Resources, for a description of Mitigation Measure 4.16-1. See Section 4.6, Terrestrial Biological Resources, for a description of Mitigation Measures 4.6-1a through 4.6-1j, 4.6-1l, 4.6-1o, 4.6-1p, and 4.6-1n. See Impact 4.10-1 in Section 4.10, Air Quality for a description of Mitigation Measures 4.10-1a, 1b, and 1c. See Impact 4.11-1 in Section 4.11, Greenhouse Gas Emissions, above, for a description of Mitigation Measure 4.11-1; See Impact 4.18-1 in Section 4.18, Energy Conservation, above, for a description of Mitigation Measure 4.18-1.

c. Findings: Implementation of Mitigation Measures 4.13-5a and 4.13-5b would reduce Impact 4.13-5 to a less-than-significant level by installing corrosion resistant WEKO seal clamps and a corrosion-resistant liner to offshore and land segments of the MRWPCA outfall before operation of the Desalination Plant. This would ensure that outfall components that may be susceptible to corrosion would be protected before accepting brine. The CPUC has imposed Mitigation Measures 4.13-5a and 4.13-5b on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Implementation of Mitigation Measure 4.9-1 would reduce the secondary impact of Mitigation Measure 4.13-5a to a less-than-significant level by notifying recreational users of construction activities. Implementation of Mitigation Measures 4.10-1a, 1b, and 1c would reduce the secondary impacts of Mitigation Measure 4.13-5a to a less-than-significant level by requiring the use of construction equipment that meets the highest USEPA-certified tiered emission standards, by limiting idling time to 5 minutes, and by implementing dust control procedures which would reduce PM_{10} emissions. Implementation of Mitigation Measure 4.11-1 would reduce the secondary impact of Mitigation Measure 4.13-5a to a less-than-significant level by reducing the overall carbon footprint of the proposed project through the implementation of a GHG Emissions Reduction Plan. Implementation of Mitigation Measure 4.18-1 would reduce Impact 4.13-5a to a less-than-significant level by implementing a Construction Equipment Efficiency Plan that includes mandatory energy reduction measures and by establishing idling restrictions for on- and off-road engines to reduce energy consumption during construction. Implementation of Mitigation Measures 4.6-1a through 4.6-1g, 4.6-1i, 4.6-1n, 4.6-1p, 4.6-2a, 4.6-2b, 4.12-1b, and 4.14-2 would reduce the secondary impacts of Mitigation Measure 4.13-5a to a less-than-significant level by reducing construction impacts on special status species and habitat by implementing avoidance, minimization, and protection measures during construction. The CPUC has imposed Mitigation Measures 4.9-1, 4.10-1a, 1b, and 1c, 4.11-1, 4.6-1a through 4.6-1g, 4.6-1i, 4.6-1n, 4.6-1p, 4.6-2a, 4.6-2b, 4.12-1b, and

4.14-2 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Implementation of Mitigation Measures 4.9-1 and 4.9-6 would reduce the secondary impacts of Mitigation Measure 4.13-5b to a less-than-significant level by maintaining traffic in a controlled and safe manner during temporary road closures and by rehabilitating roads to pre-construction conditions. Implementation of Mitigation Measures 4.10-1a, 1b, and 1c would reduce the secondary impacts of Mitigation Measure 4.13-5b to a less-than-significant level by requiring the use of construction equipment that meets the highest USEPA-certified tiered emission standards, by limiting idling time to 5 minutes, and by implementing dust control procedures which would reduce PM_{10} emissions. Implementation of Mitigation Measure 4.11-1 would reduce the secondary impact of Mitigation Measure 4.13-5b to a less-than-significant level by reducing the overall carbon footprint of the Project through the implementation of a GHG Emissions Reduction Plan. Implementation of Mitigation Measure 4.18-1 would reduce the secondary impact of 4.13-5a to a less-than-significant level by implementing a Construction Equipment Efficiency Plan that includes mandatory energy reduction measures and by establishing idling restrictions for on- and off-road engines to reduce energy consumption during construction. Implementation of Mitigation Measures 4.6-1a through 4.6-1j, 4.6-1l, 4.6-1o, 4.6-1p, and 4.6-1n would reduce the secondary impacts of Mitigation Measure 4.13-5a to a less-than-significant level by reducing construction impacts on special status species and habitat by implementing avoidance, minimization, and protection measures during construction. The CPUC has imposed Mitigation Measures 4.9-1, 4.10-1a, 1b, and 1c, 4.11-1, 4.6-1a through 4.6-1j, 4.6-1l, 4.6-1o, 4.6-1p, and 4.6-1n on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.13-C: Cumulative impacts related to Public Services and Utilities.

a. Impact:

Construction. Construction of the Project could damage or interfere with existing water, sewer, stormwater drainage, natural gas, electric, or communication utility service lines. Project construction activities could involve accidental damage, temporary disconnection, or planned relocation of utility lines, each of which could interrupt service. All cumulative projects involving future construction could cause utility impacts similar to those described for the Project. The cumulative impact resulting from one or more project affecting existing utilities would be significant.

Construction could be inconsistent with the Monterey County Integrated Waste Management Plan because, if not recycled properly, the total volume of construction wastes and excess spoils could be landfilled. Because the Integrated Waste Management Plan is intended to address countywide diversion goals, being inconsistent with this plan could result in a significant contribution to a potentially significant cumulative impact. Most of the cumulative projects listed would also generate construction-related waste. Given the landfill's finite capacity and the potential for waste diversion, and conservatively assuming all cumulative projects would dispose of solid waste at the Monterey Peninsula Landfill, a cumulatively considerable contribution to such a significant impact could occur if cumulative

projects generating solid waste do not adhere to State requirements for diversion of solid waste from landfills.

Operation. The Project's brine stream, when combined with the RUWAP Desalination Element brine stream, could have the potential to contribute a considerably cumulative impact regarding exceedances of Ocean Plan water quality objectives.

The combined salinity of the Project and the RUWAP Desalination Element brine streams which would utilize the MRWPCA outfall would not be dissimilar to that of the Project alone; however, the combined salinity may still result in a significant cumulative impact.

Secondary impacts from implementation of Mitigation Measure 4.13-5a, which would involve replacing the WEKO seal clamps in the ocean outfall, could cause substantial impacts on special-status species and habitat. The Beach Junction Structure Replacement Project would begin directly after the WEKO seal clamps are installed, which has the potential to adversely impact special-status species and habitats similar to those potentially disturbed for implementation of Mitigation Measure 4.13-5a. This would result in a significant cumulative impact.

b. Mitigation: See Impact 4.13-1, in Section 4.13, Public Services and Utilities, above, for a description of Mitigation Measures 4.13-1a through 4.13-1f.

See Impact 4.13-2, in Section 4.13, Public Services and Utilities, above, for a description of Mitigation Measure 4.13-2.

See Impacts 4.3-4 and 4.3-5 in Section 4.3, Surface Water Hydrology and Water Quality, above, for a description of Mitigation Measures 4.3-4 and 4.3-5.

See Impact 4.13-5 in Section 4.13, Public Services and Utilities, above, for a description of Mitigation Measures 4.13-5a and 4.13-5b.

For secondary cumulative impacts from implementation of Mitigation Measure 4.13-5a, see Section 4.6, Terrestrial Biological Resources, above, for a description of Mitigation Measures 4.6-1a through 4.6-1g, 4.6-1i, 4.6-1n, 4.6-1p, 4.6-2a, and 4.6-2b. See Impact 4.12-1 in Section 4.12, Noise and Vibration, for a description of Mitigation Measure 4.12-1b. See Impact 4.14-2 in Section 4.14, Aesthetic Resources, for a description of Mitigation Measure 4.14-2.

c. Findings: Implementation of Mitigation Measures 4.13-1a through 4.13-1f would reduce the significant cumulative impact associated with disruption to utilities to a less-than-significant level by locating and mapping all utilities in the Project area on construction drawings; coordinating with utilities, fire departments, and customers (if affected) regarding planned excavations and/or planned utility disruptions; regular review of safety measures with employees when working near high-priority utilities; and creation of an emergency response plan which outlines procedures to follow in case of a leak or explosion. Implementation of Mitigation Measure 4.13-2 would reduce the significant cumulative impact associated with solid waste regulations to a less-than-significant level by ensuring that the waste reduction and recycling plan is developed in coordination with the Monterey Regional Waste Management District,

and in accordance with state and local waste reduction and recycling policies. Implementation of Mitigation Measures 4.3-4 and 4.3-5 would reduce the significant cumulative impact regarding exceedance of wastewater treatment requirements to a less-than-significant level by requiring CalAm to conduct water quality assessments prior to Project operation and to implement a comprehensive Monitoring and Reporting Plan that is consistent with the Ocean Plan requirements. Implementation of Mitigation Measures 4.13-5a and 4.13-5b would reduce the significant cumulative impact associated with corrosion of the MRWPCA outfall to a less-than-significant level by installing corrosion resistant WEKO seal clamps and a corrosion-resistant liner to offshore and land segments of the MRWPCA outfall before operation of the Desalination Plant. This would ensure that outfall components that may be susceptible to corrosion would be protected before accepting brine.

Implementation of Mitigation Measures 4.6-1a through 4.6-1g, 4.6-1i, 4.6-1n, 4.6-1p, 4.6-2a, and 4.6-2b would reduce the secondary cumulative impacts of Mitigation Measure 4.13-5a to a less-than-significant level by implementing a construction worker environmental awareness training and education program; avoidance and minimization measures for applicable special-status species and habitats; protective measures for western snowy plover; a habitat mitigation and monitoring plan; control measures for spread of invasive plants; and measures to avoid, minimize and compensate for direct construction impacts to sensitive communities. Implementation of Mitigation Measure 4.12-1b would reduce the secondary cumulative impacts of Mitigation Measure 4.13-5a to a less-than-significant level by requiring general noise controls for construction equipment. Implementation of Mitigation Measure 4.14-2 would reduce the secondary cumulative impacts of Mitigation Measure 4.13-5a to a less-than-significant level by requiring site-specific nighttime lighting measures.

The CPUC has imposed Mitigation Measures 4.3-4, 4.3-5, 4.6-1a through 4.6-1g, 4.6-1i, 4.6-1n, 4.6-1p, 4.6-2a, 4.6-2b, 4.12-1b, 4.13-1a through 4.13-1f, 4.13-2, 4.13-5a, 4.13-5b, and 4.14-2 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

4.14 Aesthetic Resources

Impact 4.14-2: Temporary sources of substantial light or glare during construction.

a. Impact: Construction of the ASR-5 and ASR-6 Wells and all pipeline routes (including optional routes) have the potential to introduce temporary sources of substantial light into the project area during nighttime construction. This would be a significant impact.

b. Mitigation: In accordance with Mitigation Measure 4.14-2, exterior lighting shall be prevented from affecting nighttime views by using low-intensity street lighting and low-intensity exterior lighting; lighting fixtures that are cast downward and shielded to prevent light from spilling onto adjacent offsite uses; lighting fixtures that are designed and placed to minimize glare that could affect users of adjacent properties, buildings, and roadways; and fixtures and standards that conform to state and local safety and illumination requirements. CalAm shall ensure these measures are implemented at all times during nighttime construction and for the duration of all required nighttime construction activity.

c. Findings: Implementation of Mitigation Measure 4.14-2 will reduce Impact 4.14-2 to a less-than-significant level by ensuring that nighttime construction activities utilize lighting fixtures and lighting that will prevent nighttime views from being adversely affected. The CPUC has imposed Mitigation Measure 4.14-2 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.14-3: Permanent impacts on scenic resources (vistas, roadways, and designated scenic areas) or the visual character of the project area and its surroundings.

a. Impact: The aboveground components of the subsurface slant wells and the ASR-5 and ASR-6 Wells could have an adverse impact on scenic resources and/or the existing visual character of the surrounding area.

b. Mitigation: In accordance with Mitigation Measure 4.14-3a, CalAm shall avoid reflective exterior finishes and treat visible structures with earth-tone finishes to reduce contrast with the ground surface and increase compatibility with the visual setting. Primary structures shall be treated with complementary colors in the brown, tan, gray, or green color spectrum, or with other natural colors. Choose paint and exterior finishes to ensure that structures blend into the surrounding landscape.

   In accordance with Mitigation Measure 4.14-3b, CalAm shall ensure that fencing is designed to be minimally intrusive and to complement the architectural character of the proposed facility and the community. Fencing design shall be coordinated with nearby landscaping and Project facility design to ensure all Project components blend with the surrounding community and/or natural setting. Native plants, trees, or shrubs shall be used whenever practicable to screen views of the proposed aboveground facilities. Facility screening shall be in keeping with the character of the site and setting, and walled perimeters shall be avoided in natural settings to minimize the dominance of structures.

c. Findings: Implementation of Mitigation Measures 4.14-3a and 4.14-3b would reduce Impact 4.14-3 to a less-than-significant level by ensuring that facility design is compatible with the surround natural and built environment, and that permanent fencing and screening of components is designed to blend with the surrounding community and/or natural setting. The CPUC has imposed Mitigation Measures 4.14-3a and 4.14-3b on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.14-4: Permanent new sources of light or glare.

a. Impact: The ASR-5 and ASR-6 Wells and the Carmel Valley Pump Station would introduce permanent sources of substantial light into the project area. This would be a significant impact to nearby motorists and residences.

b. Mitigation: See Impact 4.14-2, above, for a description of Mitigation Measure 4.14-2.

c. Findings: Implementation of Mitigation Measure 4.14-2 would reduce Impact 4.14-4 to a less-than-significant level by ensuring that operational nighttime lighting will prevent nighttime views from being adversely affected. The CPUC has imposed

Mitigation Measure 4.14-2 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.14-C: Cumulative impacts related to Aesthetic Resources.

a. Impact: Construction could result in a significant nighttime lighting impact associated with nighttime construction of the subsurface slant wells. The Beach Junction Structure Project may require temporary nighttime construction lighting on the beach seaward of the slant well construction area, and may result in nighttime lighting impacts that would overlap with or occur in sequence with the proposed project's nighttime lighting at the slant well construction area. If overlap did occur, the combined effects could exceed the established thresholds of significance, resulting in a significant cumulative impact.

b. Mitigation: See Impact 4.14-2, above, for a description of Mitigation Measure 4.14-2.

c. Findings: Implementation of Mitigation Measure 4.14-2 would reduce the significant cumulative effect associated with construction nighttime lighting to a less-than-significant level by ensuring that nighttime lighting has minimal spillover from construction of the subsurface slant wells. The CPUC has imposed Mitigation Measure 4.14-2 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

4.15 Cultural and Paleontological Resources

Impact 4.15-2: Cause a substantial adverse change during construction in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines or historic properties pursuant to 36 CFR 800.5.

a. Impact: Construction of the Castroville Pipeline at Tembladero Slough and the Source Water Pipeline in the Lapis Sand Mining Plant Historic District could result in a significant impact on archaeological resources.

   While no additional impacts or adverse effects on archaeological resources are expected, the possibility of uncovering unknown archaeological resources in the remaining direct APE cannot be entirely discounted. The potential inadvertent discovery of archaeological resources could be a significant impact.

b. Mitigation: In accordance with Mitigation Measure 4.15-2a, a qualified archaeologist shall prepare and implement an Archaeological Monitoring Plan, and oversee and direct all archaeological monitoring activities during Project construction. Archaeological monitoring shall be conducted for all subsurface excavation work within 100 feet of the Castroville Pipeline at Tembladero Slough and the Salinas River; and the Source Water Pipeline in the Lapis Sand Mining Plant Historic District. The plan shall establish a cultural resources training program for construction workers; an on-site monitor; monitoring protocols; requirements for monitoring reports; a reporting schedule; protocols for an encounter of cultural resources; security protocols; and notification protocols. If archaeological materials are encountered, all soil disturbing activities within 100 feet of the find shall cease until the resource is evaluated. In the event archaeological resources qualifying as either historical resources pursuant to CEQA section 15064.5 or as unique

archaeological resources as defined by Public Resources Code 21083.2 are encountered, preservation in place shall be the preferred manner of mitigation. If preservation in place is not feasible, the applicant shall implement an Archaeological Research Design and Treatment Plan (ARDTP).

In accordance with Mitigation Measure 4.15-2b, if prehistoric or historic-era cultural materials are encountered, all construction activities within 100 feet shall halt and the Lead Agencies shall be notified. For discoveries on lands other than Army-owned lands, a Secretary of the Interior-qualified archaeologist shall inspect the find within 24 hours of discovery. If the find is determined to be potentially significant, the archaeologist, in consultation with MBNMS, the CPUC and the appropriate Native American representative shall determine whether preservation in place is feasible. If avoidance is not feasible, a qualified archaeologist, in consultation with the Lead Agency and the appropriate Native American representative, shall prepare and implement a detailed ARDTP. If cultural resources are inadvertently discovered during construction on Army-owned property, work shall immediately cease within a 100-foot radius of the find and the Army, Presidio of Monterey, Cultural Resources Manager (CRM) will be contacted to assess the discovery. For discoveries on Army lands, the CRM will implement procedures set forth in the Presidio's Integrated Cultural Resources Management Plant (ICRMP) and Army Regulation (AR 200-1), which may include completion of consultation under Section 106 of the National Historic Preservation Act (NHPA) prior to resuming construction in the vicinity of the find.

c. Findings: Implementation of Mitigation Measures 4.15-2a and 4.15-2b would reduce Impact 4.15-2 to a less-than-significant level by requiring archaeological monitoring and established protocols for accidental discovery of archaeological resources that are consistent with state and federal regulations. The CPUC has imposed Mitigation Measures 4.15-2a and 4.15-2b on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.15-4: Disturbance of any human remains, including those interred outside of formal cemeteries, during construction.

a. Impact: While no known human remains have been documented within the Project direct APE, the possibility of inadvertently uncovering human remains cannot be entirely discounted. The potential inadvertent discovery of human remains is considered a significant impact.

b. Mitigation: In accordance with Mitigation Measure 4.15-4, in the event of discovery or recognition of any human remains during construction activities, such activities within 100 feet of the find shall cease. Depending upon the jurisdiction of the land where the find may occur, the appropriate authority must be notified and an investigation into the cultural origin and/or potential cause of death is required. If the remains are determined to be Native American, the particular protocols must be followed according to those that fall under the jurisdiction of the location of the discovery.

c. Findings: Implementation of Mitigation Measure 4.15-4 would reduce Impact 4.15-4 to a less-than-significant level by ensuring that human remains discovered during construction are properly handled according to the regulations of the jurisdiction in

which the discovery is found. The CPUC has imposed Mitigation Measure 4.15-4 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

4.16 Agricultural Resources

Impact 4.16-1: Result in changes in the existing environment that, due to their location or nature, could temporarily disrupt agricultural activities or result in the permanent conversion of farmland to non-agricultural use.

a. Impact: Construction of the 0.5-mile Source Water Pipeline, new Desalinated Water Pipeline, and Castroville Pipeline north of Charles Benson Road would require earthmoving activities and surface disturbance within or near farmland that could result in the loss of topsoil and/or soil compaction and reduce agricultural productivity or result in the conversion of farmland to non-agricultural uses. This would be a significant impact.

b. Mitigation: In accordance with Mitigation Measure 4.16-1, CalAm and its construction contractor(s) shall incorporate measures into construction plans and specifications for all construction activities located in farmland areas to minimize adverse impacts on farmland, including notifying affected property owners at least 90 days prior to initiating construction activities that have the potential to interfere with agricultural operations; minimize the extent of the construction disturbance, including construction access, in agricultural areas to the maximum extent feasible; stockpiling surface and subsurface soil layers separately during trenching activities; using the separated soil horizons as backfill in the appropriate location in the soil profile; backfilling within 5 percent of the original density; ripping the uppermost 3 feet of soil to avoid compaction; inspecting agricultural drainage systems before and after construction to ensure functionality; and restoring disturbed areas to pre-construction conditions following construction.

c. Findings: Implementation of Mitigation Measure 4.16-1 would reduce Impact 4.16-1 to a less-than-significant level by coordinating with landowners about the construction schedule, and ensuring that farmland is returned to pre-construction conditions following any disturbance to farmland during construction. The CPUC has imposed Mitigation Measure 4.16-1 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.16-C: Cumulative impacts related to Agricultural Resources.

a. Impact: The Project would temporarily disrupt agricultural uses along the north side of Charles Benson Road, and construction activities could result in the loss of topsoil and soil compaction that could reduce agricultural productivity. The RUWAP Recycled Water Project and the MPLRP also would have short-term construction-related effects that could result in the conversion of agricultural land to non-agricultural uses. These projects' impacts could combine to result in a significant cumulative impact.

b. Mitigation: See Impact 4.16-1, above, for a description of Mitigation Measure 4.16-1.

c. Findings: Implementation of Mitigation Measure 4.16-1 would reduce the significant cumulative impact associated with conversion of agricultural land to non-agricultural uses to a less-than-significant level by coordinating with landowners about the construction schedule, and ensuring that farmland is returned to pre-construction conditions following any disturbance to farmland during construction. The CPUC has imposed Mitigation Measure 4.16-1 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

4.18 Energy Conservation

Impact 4.18-1: Use large amounts of fuel and energy in an unnecessary, wasteful, or inefficient manner during construction.

a. Impact: Construction of the Project would require the use of fuels (primarily gasoline and diesel) for operation of construction equipment (e.g., dozers, excavators, and trenchers), construction vehicles (e.g., dump and delivery trucks), and construction worker vehicles. Direct energy use would also include the use of electricity required to power construction equipment (e.g., welding machines and electric power tools). Construction and decommissioning activities could result in wasteful or inefficient use of energy if construction and decommissioning equipment is not well maintained, if equipment is left to idle when not in use, or if haul trips are not planned efficiently. This would be a significant impact.

b. Mitigation: In accordance with Mitigation Measure 4.18-1, a Construction Equipment Efficiency Plan shall be prepared that identifies the specific measures and performance standards that CalAm (and its construction contractors) will implement as part of project construction and decommissioning to increase the efficient use of construction equipment and vehicles to the maximum extent feasible. Such measures shall include, but not necessarily be limited to: procedures to ensure that all construction equipment is properly tuned and maintained at all times; requirement to provide options for worker carpooling; a commitment to utilize existing electricity sources where feasible rather than portable diesel-powered generators; and identification of procedures (including the routing of haul trips) that will be followed to ensure that all materials and debris hauling is conducted in a fuel-efficient manner. The plan shall be submitted to CPUC and the Sanctuary for review and approval at least 30 days prior to the beginning of construction activities and at least 30 days prior to the beginning of decommissioning activities.

   See Impact 4.10-1 in Section 4.10, Air Quality, below, for a description of Mitigation Measure 4.10-1b.

c. Findings: Implementation of Mitigation Measures 4.18-1 and 4.10-1b would reduce Impact 4.18-1 to a less-than-significant level by implementing a Construction Equipment Efficiency Plan that includes mandatory energy reduction measures and by establishing idling restrictions for on- and off-road engines to reduce energy consumption during construction. The CPUC has imposed Mitigation Measures 4.18-1 and 4.10-1b on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.18-C: Cumulative impacts related to Energy Resources.

a. Impact: Project construction could use large amounts of fuel or energy in a wasteful or inefficient manner, which in the context of local and regional energy supplies, in combination with the energy demands of the cumulative projects list, could result in a significant cumulative impact.

b. Mitigation: See Impact 4.10-1, in Section 4.10, Air Quality, above, for a description of Mitigation Measure 4.10-1b.

   See Impact 4.18-1, above, for a description of Mitigation Measure 4.18-1.

c. Findings: Implementation of Mitigation Measures 4.10-1b and 4.18-1 would reduce the significant cumulative impact associated with using fuel or energy in a wasteful or inefficient manner to a less-than-significant level by implementing a Construction Equipment Efficiency Plan that includes mandatory energy reduction measures and by establishing idling restrictions for on- and off-road engines to reduce energy consumption during construction. The CPUC has imposed Mitigation Measures 4.18-1 and 4.10-1b on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

4.20 Socioeconomics and Environmental Justice

Impact 4.20-1: Reductions in the rate of employment, total income, or business activity in Monterey County.

a. Impact: Access for tourists to businesses like retail and dining as well as recreational opportunities may be temporarily impacted by pipeline construction, which would temporarily affect access to streets, parking spaces, and trails. Although pipeline construction would proceed at a rate of 150 to 250 feet per day, the total duration of disturbance at any one location would generally be 1 to 2 weeks. This could result in a significant impact on some individual businesses in the affected locations.

b. Mitigation: See Impact 4.9-1 in Section 4.19, Traffic and Transportation, above, for a description of Mitigation Measure 4.9-1.

c. Findings: Implementation of Mitigation Measure 4.9-1 would reduce Impact 4.20-1 to a less-than-significant level by requiring implementation of circulation and detour plans to minimize impacts on local streets, implementing a public information program to provide advance notice to businesses, residents, and visitors, and restoring roads and streets to normal operation by covering trenches with steel plates outside of normal work hours or when work is not in progress. The CPUC has imposed Mitigation Measure 4.9-1 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

b. FINDINGS REGARDING IMPACTS IDENTIFIED IN THE EIR/EIS AS SIGNIFICANT AND UNAVOIDABLE

The following issues were identified in the EIR/EIS as having the potential to cause significant and unavoidable impacts. 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 the significant impact(s) and the residual effect would remain significant.

4.6 Terrestrial Biological Resources

Impact 4.6-4: Be inconsistent with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance with local tree ordinances.

a. Impact: Several project facilities would occur in areas that may qualify as primary habitat according to the City of Marina LCLUP. These facilities include the subsurface slant wells, Source Water Pipeline, new Desalinated Water Pipeline, new Transmission Main, and the staging area located at Beach Road. The City of Marina LCLUP policy governing protection of primary and secondary habitat prohibits development in primary habitat that is not protective of and dependent upon that habitat. Implementation and construction of these components would be inconsistent with the City of Marina LCLUP policy because the components are not uses or developments dependent upon the sensitive resources that comprise the primary habitat present. Impacts would be significant and unavoidable, even with implementation of mitigation measures.

   To the extent feasible, project facilities would be sited so as to minimize tree removal and avoid impacts on trees. Depending on final siting and design of the proposed project facilities, as well as the construction methods and techniques, implementation of the proposed project could necessitate tree removal at various locations throughout the project area. Any trees removed during project construction may be inconsistent with local tree ordinances. This would be a potentially significant impact.

b. Mitigation: See Impacts 4.6-1 and 4.6-2, in Section 4.6 Terrestrial Biological Resources, above, for a description of Mitigation Measures 4.6-1d through 4.6-1f, and 4.6-1n, which provide compensation for permanent impacts on sensitive biological resources, including western snowy plover, special-status plants, Smith's blue butterfly, sensitive communities, and ESHA. See also Mitigation Measure 4.6-2b for a description of the Habitat Mitigation and Monitoring Plan, which implements restoration and preservation practices for these sensitive biological resources that would occur within the Monterey Bay coastal dune ecosystem.

   In accordance with Mitigation Measure 4.6-4, CalAm shall survey the project footprint to identify, measure, and map trees subject to local tree removal ordinances at least 30 days prior to start of planned ground disturbance or tree removal. Any trees that are subject to local tree removal ordinances shall be avoided to the extent practicable. If tree removal cannot be avoided by project construction, then CalAm shall comply with the applicable local tree policies or ordinances, obtain appropriate tree removal permits from applicable local agencies, and comply with those permits. Tree removal, preservation, or mitigation on Army property would be done in accordance with the Integrated Natural Resource Management Plan Presidio of Monterey and Ord Military Community.

c. Findings: Implementation of Mitigation Measure 4.6-4 would reduce impacts associated with consistency with local tree ordinances to a less-than-significant level by ensuring that CalAm complies with local tree policies or ordinances if the removal of trees subject to local tree ordinances cannot be avoided. Implementation of Mitigation Measures 4.6-1d through 4.6-1f, 4.6-1n, and 4.6-2b would not reduce significant impacts associated with inconsistency with the City of Marina LCLUP policy; therefore, Impact 4.6-4 would remain significant and unavoidable. The CPUC

has imposed Mitigation Measures 4.6-1d through 4.6-1f, 4.6-1n, 4.6-2b, and 4.6-4 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.6-C: Cumulative impacts related to Terrestrial Biological Resources.

a. Impact:

Special-status species. It is possible that the Project and additional projects proposed within the Fort Ord HMP area could affect other habitat types that are not explicitly identified for conservation in the HMP (e.g., non-native grassland, coastal sage scrub, and oak woodland). If not properly mitigated, cumulative impacts from these projects on such habitats and dependent special-status species could be significant, and the Project could have a cumulatively considerable contribution to such cumulative impact.

The CEMEX Removal Plan, Monterey Shores Resort, 90-Inch Bay Avenue Outfall Phase 1, Slant Test Well Project, Moss Landing Community Plan, and The Collection at Monterey Bay Resort would affect beach or dune areas that may support western snowy plover. Implementation of the CEMEX Removal Plan, Monterey Bay Shores Resort and Moss Landing Community Plan projects could occur at the same time as the Project construction and therefore could adversely affect western snowy plover and its habitat through heavy equipment use, dust generation, elevated noise levels, increased human activity, and loss of habitat. The exact acreage of western snowy plover habitat that would be impacted from these cumulative projects is unknown, but could be 40 to 60 acres of coastal dune habitat. The overall effects of these projects would be a cumulatively considerable contribution to this significant impact.

Operation of the brine storage basin at the Desalination Plant could impact migrating waterfowl. The Dredge Laguna Grande and Roberts Lake Project could potentially impact migratory waterfowl by disturbing them during dredging activities, but this would be a short-term effect. Through implementation of the CEMEX Removal Plan, the existing dredge pond located at the CEMEX property, which provides habitat for migratory waterfowl, would be reclaimed by natural processes. Although the impacts to migratory waterfowl would be short-term (for dredging of Laguna Grande and Roberts Lake) and small (for reclamation of the dredge pond), these projects could contribute to a significant cumulative impact on migrating waterfowl, when viewed in combination with the Project's significant impact.

Construction and operation of the Project would temporarily and permanently impact sensitive vegetation types, ESHA, and freshwater marsh wildlife habitat. Concurrent construction and/or operation of the Salinas Valley Water Project Phase II, Laguna Seca Villas, Omni Enterprises, LLC, Ferrini Ranch Subdivision, Marina Downtown Vitalization Specific Plan, Marina Station, Monterey Bay Shores Resort, Rancho Canada Village, Rancho Canada Golf Club, RUWAP Desalination Element, RUWAP Recycled Water Element, Moss Landing Community Plan, TAMC Monterey Peninsula Light Rail Project, Slant Test Well Project, The Collection at Monterey Bay Resort, and 90-Inch Bay Avenue Outfall Phase 1 could result in a significant cumulative impact on sensitive habitat communities and associated special-status species and ESHA through vegetation trimming or removal, elevated noise and dust levels, and increased human presence.

Wetlands or Other Waters. Project construction and operation could temporarily impact federal wetlands, federal other waters, and/or waters of the state. These impacts would be temporary and, upon completion of construction, any affected wetlands would be restored to their approximate pre-construction condition. The TAMC Monterey Peninsula Light Rail Project, Ferrini Ranch Subdivision, Marina Station, Moss Landing Community Plan, Dredge Laguna and Roberts Lake, Monterey Pacific Grove ASBS Stormwater Management Project, and Route 156 West Corridor Project would cause temporary or permanent impacts on federal wetlands, federal other waters, and/or waters of the state. The exact acreage of wetland and other waters that would be impacted from these cumulative projects is unknown, but could be 35 acres. Concurrent construction and/or operation of these projects could result in significant cumulative impacts on these resources through wetlands fill or draining and increased human presence, to which the Project could have a significant contribution.

City of Marina Local Coastal Program Land Use Plan. Construction of Project components would be inconsistent with the City of Marina LCLUP policy since the project is not a resource-dependent use. The test slant well at the CEMEX site is a cumulative project that is within the geographic scope of this analysis. The test slant well was also found to be inconsistent with the City of Marina LCLUP policy. Implementation of the Project would have a significant contribution to this test slant well impact related to inconsistencies with the City of Marina LCLUP policy.

Local Tree Ordinances. Construction of Project components could require trimming or removal of protected trees, inconsistent with local tree ordinances. The Ferrini Ranch Subdivision and Route 156 West Corridor Project would involve removal of a substantial number of trees. Local governments with jurisdiction over the geographic scope of cumulative impacts analysis (e.g., Seaside and Monterey County) have tree ordinances established for the purpose of protecting important trees and compensating for their removal. If the Project and cumulative projects within the geographic scope of the cumulative impact analysis involve tree removal and fail to comply with applicable tree ordinances, a significant cumulative effect would result, to which the Project could have a significant (i.e., cumulatively considerable) contribution.

Inconsistent with an adopted Habitat Conservation Plan. Portions of the Proposed ASR Facilities (ASR-5 and ASR-6 Wells, ASR Pump-to-Waste Pipeline, ASR Conveyance Pipeline, and ASR Recirculation Pipeline) located east of General Jim Moore Boulevard, and portions of the new Transmission Main and new Transmission Main using the optional alignment are located within the 1997 Installation-Wide Multispecies HMP. Many cumulative projects occur on former Fort Ord lands within the boundaries of the HMP. Construction and operation of these projects may include activities subject to HMP resource conservation and management requirements. Failure of the Project and one or more cumulative project to implement an applicable HMP conservation and/or management requirement would constitute a significant cumulative impact to which the Project could have a significant (i.e., cumulatively considerable) contribution.

b. Mitigation: See Section 4.6, Terrestrial Biological Resources, above, for a description of Mitigation Measures 4.6-1a through 4.6-1p, 4.6-2a, 4.6-2b, 4.6-3, 4.6-4, and 4.6-6.

See Section 4.12, Noise and Vibration, above, for a description of Mitigation Measures 4.12-1b and 4.12-5.

See Impact 4.14-2 in Section 4.14, Aesthetic Resources, above, for a description of Mitigation Measure 4.14-2.

c. Findings: Implementation of Mitigation Measures 4.6-1a through 4.6-1p, 4.6-2a, 4.6-2b, 4.6-3, 4.6-4, 4.6-6, 4.12-1b, 4.12-5, and 4.14-2 would reduce all but the LCLUP element of Impact 4.6-C to a less-than-significant cumulative contribution by requiring programs, plans, and actions that would cause the Project's residual impacts on special-status species, sensitive natural communities, wetlands and other waters, local tree ordinances, and consistency with adopted Habitat Conservation Plans to be minimal. However, even with implementation of Mitigation Measures 4.6-1d through 4.6-1f, 4.6-1n, and 4.6-2b, the Project would still be inconsistent with the City of Marina LCLUP policy, and the Project would make a considerable contribution to a significant and unavoidable cumulative impact.

4.9 Traffic and Transportation

Impact 4.9-C: Cumulative impacts related to Traffic and Transportation.

a. Impact: Due to increased traffic and transportation network disruptions, concurrent construction of the Project and most of the cumulative projects would result in potentially significant cumulative impacts on traffic and transportation access and facilities. Such impacts would include a short-term increase in vehicle traffic, reductions in the number or the available width of travel lanes on roads where construction would occur, increased wear-and-tear on the designated haul routes used by construction vehicles, and increases in demand for parking spaces to accommodate construction worker vehicles, among others. In addition, concurrent construction of these projects could create traffic safety hazards for vehicles, bicyclists, and pedestrians on public roadways. Access to adjacent land uses and streets for both general traffic and emergency vehicles could be disrupted. The Project's contributions to these impacts would occur along routes adjacent to most pipeline alignments and above-ground project components south of Reservation Road. Although the construction schedule for many of the cumulative projects is unknown, the construction schedule for several future cumulative projects could overlap with the anticipated Project construction schedule, thereby causing the types of regional and local traffic and transportation impacts described above. Potentially significant cumulative traffic and transportation access and facility impacts of the types described above could occur along regional transportation corridors, including Highways 1, 68, and 218, in the vicinity of Project components. Such impacts also would be expected along local arterial and neighborhood roadways connecting regional thoroughfares with specific project construction sites. Based upon the anticipated Project and cumulative project construction schedules, potentially significant cumulative impacts on local roadways would likely be concentrated in the cities of Marina, Seaside, and Sand City, with possible potential significant cumulative impacts in the cities of Monterey and Pacific Grove, and Monterey County.

b. Mitigation: See Section 4.9, Traffic and Transportation, above, for a description of Mitigation Measures 4.9-1 and 4.9-7.

In accordance with Mitigation Measure 4.9-C, CalAm shall coordinate with the appropriate planning agency within each affected jurisdiction to develop and implement a Construction Traffic Coordination Plan. The purpose of the plan shall be to lessen the cumulative effects of Project and local development project construction-related traffic delays and congestion. The plan shall address construction-related traffic associated with all project sites in the vicinity of Project components (i.e., within 1 mile or would use the same roads) and whose construction schedules overlap that of the Project.

c. Findings: Implementation of Mitigation Measures 4.9-1 and 4.9-7 would lessen the Project's contribution to cumulative construction-related traffic and transportation impacts. Specifically, these measures would reduce the Project's incremental contribution to congestion and traffic delays on area roadways, safety hazards, emergency access, alternative transportation facilities, wear and tear, and parking impacts. However, given the size of the Project, along with the number of cumulative projects and uncertainty regarding cumulative project construction timing, the residual Project transportation impacts could still contribute substantially to cumulative local and regional traffic and roadway capacity disruptions, a cumulatively considerable significant impact.

   Implementation of Mitigation Measure 4.9-C is designed to further reduce the Project's incremental contribution to address the potential cumulative impact. However, there is no guarantee that local agencies would participate in such coordination efforts, but the local agencies can and should impose Mitigation Measure 4.9-C. Therefore, even though this mitigation measure could reduce the Project's cumulative contribution to a less-than-significant level, the conclusion remains that the Project's incremental contribution to potential significant cumulative effects would be significant and unavoidable. The CPUC has imposed Mitigation Measures 4.9-1, 4.9-7, and 4.9-C on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

4.10 Air Quality

Impact 4.10-1: Generate emissions of criteria air pollutants and contribute to a violation of an ambient air quality standard during construction.

a. Impact: Short-term emissions associated with construction of the Project could contribute to an exceedance of a state and/or federal standard for ozone, NO2, and, PM10 based on estimated maximum daily mass emissions levels. This would be a significant impact.

b. Mitigation: In accordance with Mitigation Measure 4.10-1a, CalAm and/or its construction contractor shall make a good faith effort to use available construction equipment that meets the highest USEPA-certified tiered emission standards or is alternatively powered (e.g., with electricity, natural gas, propane, methanol and ethanol blends, or gasoline) construction equipment. For all pieces of equipment that would neither meet Tier 4 emission standards nor be alternatively powered, CalAm or its construction contractor shall provide to the CPUC documentation from two local heavy construction equipment rental companies that indicate that the companies do not have access to higher-tiered equipment or alternatively powered equipment for the given class of equipment.

In accordance with Mitigation Measure 4.10-1b, CalAm and/or its construction contractor(s) shall prepare and implement a written idling policy and distribute it to all equipment operators. The idling policy shall extend the 5-minute idling limit to cover all on-road vehicles (regardless of gross vehicular weight rating) and shall further require that for all diesel-powered off-road engines, the idling limit is reduced to 2 minutes, while maintaining the exceptions specified in Title 13 CCR Section 2449(d)(3). Clear signage of these requirements shall be provided for construction workers at all access points to construction areas.

In accordance with Mitigation Measure 4.10-1c, CalAm shall require its construction contractor(s) to implement a dust control plan that includes measures to water active construction areas at least three times per day; cover haul trucks; use water sweepers at construction sites and/or adjacent roads; apply soil stabilizers to inactive construction areas; cover exposed stockpiles; limit speeds on unpaved roads to 15 mph; install erosion control measures; replant native vegetation; wash wheels before exiting certain construction areas; and post publicly-available signs for dust complaint contacts.

In accordance with Mitigation Measure 4.10-1e, CalAm shall work with the Monterey Bay Air Resources District (MBARD) and put forth a good faith effort to fund an off-site mitigation program that would be contemporaneous with Project construction to offset construction-related NOx.

c. Findings: Exceedances of ozone and NO_2 standards would remain a significant and unavoidable impact even with implementation of Mitigation Measures 4.10-1a, 4.10-1b, and 4.10-1e. Implementation of Mitigation Measures 4.10-1a through 4.10-1c would reduce the impact of PM_{10} standard exceedances to a less-than-significant level by requiring equipment to meet the highest tiered emission standards, by imposing idling restrictions, and by requiring the implementation of a dust control plan. The CPUC has imposed Mitigation Measures 4.10-1a through 4.10-1e on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.10-2: Construction activities could conflict with implementation of the applicable air quality plan.

a. Impact: The most recently adopted air quality plan for the project area is the 2012 AQMP. The 2012 AQMP documents the MBUAPCD's progress toward attaining the state 8-hour ozone standard. Any project that could conflict with the MBUAPCD's goal of attaining the state 8-hour ozone standard would be considered to conflict with the intent of the 2012 AQMP. Project-related short-term construction emissions with mitigation measures incorporated would exceed the significance threshold for NOX (see Impact 4.10-1, above); therefore, the project would not support the primary goal of the 2012 AQMP, and the impact associated with conflicting or obstructing implementation of the applicable air quality plan would be significant.

b. Mitigation: See Impact 4.10-1, above, for a description of Mitigation Measures 4.10-1a, 4.10-1b, and 4.10-1e.

c. Findings: As identified under Impact 4.10-1, above, implementation of Mitigation Measures 4.10-1a, 4.10-1b, and 4.10-1e would not reduce project-related NO_X

emissions to below the significance threshold. Therefore, this impact is considered to be significant and unavoidable, even with implementation of mitigation. The CPUC has imposed Mitigation Measures 4.10-1a, 4.10-1b, and 4.10-1e on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.10-C: Cumulative impacts related to Air Quality.

a. Impact: Project construction activities would generate short-term NOx emissions in quantities that would exceed the MBUAPCD threshold. The cumulative impact of Project construction emissions associated with the potential to contribute to a violation of an ambient air quality standard and conflict with implementation of the applicable air quality plan and would be significant when combined with the emissions associated with cumulative projects, and the Project's incremental contribution to the cumulative impact would be cumulatively significant.

   Project PM_{10} emissions would be significant and would therefore result in a significant cumulative impact.

b. Mitigation: See Impact 4.10-1, above, for a description of Mitigation Measures 4.10-1a through 4.10-1e.

c. Findings: Implementation of Mitigation Measures 4.10-1a through 4.10-e would reduce emissions of PM_{10} during MPWSP construction activities to a level that would be below the MBUAPCD threshold. Conformance with the MBUAPCD threshold ensures that an individual project would not have a cumulative impact with respect to overall air quality within the air basin; therefore, the MPWSP's incremental contribution of construction-related PM_{10} emissions would result in a less than significant cumulative impact. Even with implementation of Mitigation Measures 4.10-1a, 4.10-1b, and 4.10-1e, the Project's cumulatively considerable contribution to the significant cumulative impact associated with NO_X emissions would remain significant and unavoidable.

4.12 Noise and Vibration

Impact 4.12-1: Cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity during construction.

a. Impact: Significant impacts related to temporary increases in daytime noise levels would result during construction of the ASR-5 and ASR-6 Wells and the Carmel Valley Pump Station. Significant nighttime noise impacts would result during construction of the new Desalinated Water Pipeline, Castroville Pipeline and Optional Alignment 1, new Transmission Main, and the ASR-5 and ASR-6 Wells. Nighttime noise impacts during installation of the Castroville Pipeline Optional Alignment 1 and during drilling and development of the ASR-5 and ASR-6 Wells would remain significant and unavoidable, even with implementation of mitigation.

b. Mitigation: In accordance with Mitigation Measure 4.12-1a, residents and other sensitive receptors within 300 feet of a daytime construction area and within 900 feet of a nighttime construction area shall be notified of the construction location, nature of activities, and schedule, in writing, at least 14 days prior to the commencement of

construction activities. CalAm or the contractor(s) shall designate a construction disturbance coordinator who would be responsible for responding to construction complaints. The coordinator shall determine the cause of the complaint and ensure that reasonable measures are implemented to correct the problem. CalAm and/or its contractor shall return all calls within 24 hours to answer noise questions and handle complaints.

See Impact 4.12-2 in Section 4.12, Noise and Vibration, above, for a description of Mitigation Measures 4.12-1b and 4.12-1c.

In accordance with Mitigation Measure 4.12-1d, CalAm or its construction contractor(s) for the ASR-5 and ASR-6 Wells shall identify feasible noise controls for implementation during well drilling development activities at the Fitch Park military housing community. The construction contractor(s) shall locate all stationary noise-generating equipment as far as possible from nearby noise-sensitive receptors. Drill rigs within 500 feet of noise-sensitive receptors shall be equipped with noise-reducing engine housings or other noise-reducing technology. Additionally, acoustic barriers and/or enclosures shall be used with a goal of reducing noise from well drilling activities to 60 dBA, L_{eq} or less at a distance of 50 feet from the construction work area. There are a number of options available to achieve this performance standard. Barrier blankets are available with a sound transmission class rating of 32, which can provide 16 to 40 dBA of sound transmission loss, depending on the frequency of the noise source (ENC, 2014). The realized sound transmission reduction of barrier blankets needs to be sufficient to achieve the performance standard of 60 dBA, L_{eq} or less at a distance of 50 feet from the construction work area.

In accordance with Mitigation Measure 4.12-1e, CalAm shall provide temporary hotel accommodations for all residences and any other nighttime sensitive receptors that would be exposed to 24-hour project construction activities, and where nighttime construction noise would exceed 60 dBA with windows closed or 35 dBA with windows open, even with implementation of acoustic barriers and/or shielding measures. The accommodations shall be provided for the duration of 24-hour construction activities. CalAm shall provide accommodations reasonably similar to those of the impacted residents in terms of number of beds and amenities. If identified accommodations do not include typical residential kitchen facilities (e.g., cooktop, oven, full size refrigerator), then CalAm shall provide displaced individuals with a per diem allowance to offset costs of meals for the period of relocation.

c. Findings: With the exception of nighttime noise impacts during construction of the Castroville Pipeline Optional Alignment 1 and the ASR-5 and ASR-6 Wells, implementation of Mitigation Measures 4.12-1a through 4.12-1c would reduce Impact 4.12-1 to a less-than-significant level by reducing impacts associated with daytime and nighttime ambient noise levels during construction by requiring a preconstruction notification and designated noise complaint program; by installing noise control devices and noise barriers on construction equipment and at staging areas; and by implementing a nighttime noise control plan that would reduce noise levels to the extent practicable. Nighttime noise impacts during installation of the Castroville Pipeline Optional Alignment 1 and during drilling and development of the ASR-5 and ASR-6 Wells would remain significant and unavoidable, even with implementation of mitigation. The CPUC has imposed Mitigation Measures 4.12-1a

through 4.12-1e on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Impact 4.12-C: Cumulative impacts related to Noise and Vibration.

a. Impact: Project components that could generate construction noise in excess of the daytime standard include the ASR Wells, and the Carmel Valley Pump Station. Project components that could generate construction noise in excess of the nighttime standard include the Desalinated Water Pipeline, Castroville Pipeline, the new Transmission main, and the ASR Wells. It is conservatively assumed that the potential exists for residual (post-mitigation) Project pipeline construction noise to combine with that of one or more of five cumulative projects to cause nighttime noise levels to exceed the sleep interference threshold. As a result, temporary cumulative increases in nighttime construction noise could result in a significant cumulative nighttime noise impact. Therefore, Project nighttime construction noise could make a cumulatively considerable contribution to a significant cumulative effect.

   Project construction could cause significant impacts from operation of roller/compactors and sheet pile drivers during pipeline installation. Six cumulative projects could contribute to cumulative effects associated with vibratory impacts on sensitive receptors; therefore, the Project would have a cumulatively considerable contribution to a significant cumulative effect.

b. Mitigation: See Section 4.12, Noise and Vibration, above, for a description of Mitigation Measures 4.12-1a through 4.12-1e, and 4.12-3.

c. Findings: Implementation of Mitigation Measure 4.12-3 would reduce the Project's contribution to a significant cumulative effect associated with vibration to a less-than-significant level by using smaller equipment and alternate construction methods and adjusting equipment operations. However, even with implementation of Mitigation Measures 4.12-1a through 4.12-1e, construction associated with the ASR Wells and Castroville Pipeline would have a residual significant and unavoidable impact. The CPUC has imposed Mitigation Measures 4.12-1a through 4.12-1e, and 4.12-3 on the Project as a condition of approval of the CPCN and implementation will be monitored through the MMRP.

Growth Inducement

Impact 6.3-C: Cumulative impacts related to growth inducement.

a. Impact: The Project would indirectly support growth by removing some water supply limitations as an obstacle to growth, thereby enabling a degree of growth under the approved general plans within the area served by the MPWSP. Several planned future cumulative projects would provide new sources of potable water supply in Monterey County. The Monterey Bay Regional Water Project (DeepWater Desal) would provide water to the City of Salinas as well as parts of Santa Cruz County. If both the Project and DeepWater Desal were approved, water from DeepWater Desal could be used to support growth in other nearby areas such as northern Monterey County. The RUWAP Desalination Element would serve the Marina Coast Water District's Ord Community with approximately 1,000 afy of potable supply. Through an agreement with FORA and the Monterey One Water, an additional 1,400 afy of potable supply

from the PWM Project would meet the build-out needs of the Ord Community (which is contiguous with CalAm's service area). The Granite Ridge Water Supply Project would increase water supply availability for the area of northern Monterey County that it would serve. The Interlake Tunnel project would reduce the amount of water spilled at Nacimiento Dam by allowing water from Nacimiento Reservoir to be stored at San Antonio Reservoir for later use. Because that project would also provide groundwater recharge, this analysis assumes it could indirectly augment supply available for groundwater users, including municipal supply that could serve additional growth. Although the primary purpose of the Salinas Valley Water Project Phase II is to combat seawater intrusion by providing a new source of surface water to offset groundwater consumption, the availability of a reliable surface water supply provided by that project could induce growth by removing supply reliability limitations as an obstacle to urban development. Growth induced by one or more of these cumulative water supply projects in combination with the Project would result in secondary effects of growth in Monterey County that would constitute a significant cumulative impact.

b. Mitigation: There are no feasible mitigation measures for Impact 6.3-C. The CPUC lacks authority to impose mitigation measures on the agencies that are responsible for considering the cumulative projects other than the Project or on the development projects that could be served by additional water. While constructing a smaller desalination plant, or none at all, could minimize this cumulative growth impact, it is not known if any of these cumulative projects will ultimately be approved and implemented. More importantly, the project objectives for the Project would not be met by approving a smaller Project, or none, in that there would not be a sufficient and reliable water source for CalAm customers. Implementation of the DeepWater Desal Alternative instead of the Project could reduce this impact since it is one of the assumed cumulative projects that create the cumulative growth impact, but as detailed below, that alternative is neither feasible nor desirable and could not timely achieve the project objectives.

c. Findings: Land use decisions are within the purview of other agencies that can and should impose mitigation measures on development projects. The same is true of the agencies that would consider approval of the cumulative water supply projects. There exist no mitigation measures that the CPUC could impose to reduce the significant cumulative impact associated with growth inducement; thus, the Project would make a considerable contribution to a significant and unavoidable cumulative impact.

X. ALTERNATIVES

The EIR/EIS examined a "no project/no action" alternative and three types of action alternatives at an equal project-level of detail: 1) alternatives to the 9.6 mgd Project; 2) desalination project proposed by other entities; and 3) reduced capacity alternatives.

First, alternatives to the 9.6 mgd Project were crafted by analyzing individual components of a desalination plant – the water intake facility, brine discharge outfalls, and desalination sites -- and identifying the least environmentally damaging and most viable alternatives of these components. The components that were considered the least environmentally damaging and were also feasible were then crafted into "whole" alternatives. These are Alternatives 1 and 2.

Second, the action alternatives analyzed two reduced capacity alternative scenarios. As discussed in the Introduction, *supra*, CalAm's application for the Project included two capacity options for build-out: the 9.6 mgd Project and the Project (a 6.4 mgd desalination plant with a water purchase agreement for 3,500 afy of advanced treated water from the PWM project). This reduced capacity option is presented in the alternatives analysis with alternative locations for the slant well intakes. These are identified as Alternatives 5a[4] (slant wells at CEMEX) and 5b (slant wells at Potrero Road).

Third, the EIR/EIS examines two other desalination projects proposed by project proponents in the Monterey District that could supplement CalAm's water service: the Monterey Bay Regional Water Project, also known as DeepWater Desal (Alternative 3), and the People's Moss Landing Desalination Project (Alternative 4).

The alternatives evaluated in detail in the EIR/EIS are as follows:

- No Project/No Action Alternative
- Alternative 1: Slant Wells at Potrero Road;
- Alternative 2: Open-Water Intake at Moss Landing;
- Alternative 3: the Monterey Bay Regional Water Project aka DeepWater Desal;
- Alternative 4: the People's Moss Landing Desalination Project aka the People's Project, and;
- Alternative 5b: Reduced Project 6.4 mgd Desalination Plant – Intake Slant Wells at Potrero Road.

Each of these alternatives is addressed below, with a brief description provided as well as findings concerning the environmental effects of the alternative, the feasibility of the alternative and the ability of the alternative to meet the basic objectives of the project. Also addressed below are several options raised by members of the public after publication of the Final EIR/EIS. The CPUC finds that Alternative 5a: Reduced Project 6.4 mgd Desalination Plant – Intake Wells at CEMEX is the environmentally superior alternative (the Project addressed in these findings) and that no other alternatives are feasible, capable of meeting project objectives and would reduce significant impacts of the Project. Indeed, the Project itself reduces the severity of impacts associated with the 9.6 mgd Project addressed throughout the EIR/EIS.

a. NO PROJECT/NO ACTION ALTERNATIVE

Under the No Project/No Action alternative, no facilities would be constructed and CalAm would continue to operate its Monterey District facilities in compliance with the CDOs and the Seaside Groundwater Basin Adjudication. At the end of the Revised CDO extension period, CalAm would have an estimated 6,380 afy of potable water available for delivery within its service area from existing sources, and would not "payback" any water to the Seaside Groundwater Basin.

While the No Project/No Action Alternative would have the least significant environmental impacts, the No Project Alternative would fail to meet almost all of the key Project objectives: in particular, it would not provide a replacement water supply for CalAm customers, it would not provide water supply reliability and it would not provide supply to allow for replenishment of

[4] This alternative is the Project, as discussed in Section V.b., and is therefore not considered in this Section.

water that CalAm previously pumped from the Seaside Basin in excess of CalAm's adjudicated right. In addition, it would not provide supply for the development of vacant legal lots of record or supply to meet demand resulting from economic rebound of the hospitality industry. The limited available water supply would trigger rationing measures and could lead to water shortages throughout the Monterey District service area. Further, the Project benefit served by the return water for the community of Castroville would not come to fruition.

Even if the PWM Project provides 3,500 afy of water to CalAm, the Project objectives would not be met. The alternative would fail to replenish the water that CalAm previously pumped from the Seaside Basin in excess of CalAm's adjudicated right, it would fail to establish water supply reliability and would not enable the development of vacant legal lots of record or supply to meet demand resulting from economic recovery and rebound of the hospitality industry. In addition to failing to provide sufficient supply to meet the average demands assumed in MPWSP planning, the No Project Alternative combined with the PWM Project would not provide sufficient supply flexibility to meet most peak demands.

The No Project Alternative would also burden the region's economy. The Project's local and regional economic benefits by way of Project construction would be lost. There would not be temporary new local employment opportunities nor increased spending on construction materials, equipment and/or services. Regarding long-term impacts, the lack of water supply would adversely affect the region's economic vitality, including the County's "four pillars" – agriculture, tourism, education, and research, by substantially reducing the reliability of water resources and water infrastructure.

While the No Project Alternative may involve the least amount of direct impact on the physical environment, there would be different impacts given the failure to supply sufficient water for customers within the CalAm service area. The CPUC concludes that the No Project Alternative does not meet the Project goals and objectives and is not a feasible alternative.

b. ALTERNATIVE 1: SLANT WELLS AT POTRERO ROAD

Alternative 1 contains the same elements as the 9.6 mgd Project and would produce the same volume of product water. However, because of the hydrogeology of the Potrero Road area, Alternative 1 would draw a greater volume of water from the Salinas Valley Groundwater Basin than the 9.6 mgd Project. In the event that the Salinas Valley Return Water obligation is 12 percent (the highest return value simulated), Alternative 1 would meet the need for replacement supplies and would meet peak month demand, but limited supply would be available for other uses, including accommodating tourism demand under recovered economic conditions and development of legal lots of record.

Moreover, pumping from slant wells at Potrero Road could potentially adversely affect aquatic habitat due to reduced surface water flow and volumes. The slant wells could also draw in groundwater that would otherwise flow to recharge the Elkhorn Slough or draw surface water directly from the Elkhorn Slough that could potentially adversely affect riparian habitat, critical habitat, or other sensitive natural communities. The Project would not generate this significant and unavoidable impact to a key biological resource.

In addition, Alternative 1 would be infeasible and would fail to meet the Project objectives to the same degree as the Project because it would fail to meet the Project's objective to develop a reliable water supply for the Monterey District and accommodate tourism demand and legal lots of record. Furthermore, because of the potential for a greater amount of water needing to be

returned to the Salinas Valley Groundwater Basin, the cost of product water could be higher to CalAm customers such that Alternative 1 would not be economically viable. Finally, this alternative would generate the same level of significant and unavoidable impacts as the Project, with the exception of the Project's disturbance of vegetation communities within coastal zone designated as primary habitat under the City of Marina's Local Coastal Land Use Plan ("LCLUP"). The California Coastal Commission ("CCC") on the other hand, determined that the test slant well did not violate the Coastal Act's policy pertaining to environmentally sensitive habitat areas ("ESHA").

In light of this, the CPUC must balance the Project's inconsistency with the LCLUP policy against the alternative's physical effect of lowering water in the Elkhorn Slough, home to many sensitive communities, including sea otters. Based on the CCC's determination of the test slant wells impact to ESHA, the CPUC concludes that Alternative 1's impact to sensitive communities in the Elkhorn Slough is a greater environmental concern than the Project's inconsistency with the LCLUP policy. Accordingly, the CPUC concludes that the Project is environmentally superior to this alternative such that the goals of CEQA would not be enhanced by implementation of Alternative 1.

c. ALTERNATIVE 2: OPEN-WATER INTAKE AT MOSS LANDING

Alternative 2 would supply seawater to the proposed 9.6 mgd desalination plant located at the Charles Benson Road site using a screened open-water intake system located offshore and southwest of the Moss Landing Harbor entrance. The existing test slant well would be decommissioned, and except for an additional 6.5 miles of source water pipeline, the desalination plant, brine discharge, new Desalinated Water Pipeline, new Transmission Main, and ASR components would be identical to the Project. Alternative 2 would meet most of the Project objectives because it contains most of the same elements as the Project and would produce the same volume of product water. However, the intake facility would be located farther north at a location that CalAm does not currently control, requiring CalAm to construct additional source water pipeline. This would also require additional permitting for the construction and operation of the open-water intake. All of this would create permitting delay, which would ultimately impact the availability of the supply relative to the SWRCB's CDOs, delaying CalAm's ability to service its customers and meet the Project objectives.

Moreover, the open water intake system of Alternative 2 would have the potential to degrade the physical structure of a geologic resource or alter oceanographic processes, such as sediment transport. The open water intake system could affect marine biological resources during construction and operation and have a greater impact on marine species, natural community, or habitat and, therefore, is not an element favored by the California Coastal Commission. In addition to this, construction for additional pipeline would result in an overall increase in construction emissions compared to the Project.

While this alternative would produce the same amount of desalinated product water, no desalinated water would need to be returned to the SVGB. Thus, the Project benefit served by the return water for the community of Castroville would not come to fruition. The alternative also fails to meet Project objectives concerning timely provision of water so that CalAm may comply with legal orders and cease unlawful and environmentally damaging diversions from the Carmel River. In addition, this alternative would result in significant environmental impacts that would not be generated by the Project, but would not ameliorate or reduce any significant effects of the Project. Therefore, it is infeasible and inferior to the Project.

d. ALTERNATIVE 3: MONTEREY BAY REGIONAL WATER PROJECT AKA THE DEEPWATER DESALINATION PROJECT

Alternative 3 includes the construction and operation of a screened open ocean intake system, a brine discharge system, a seawater desalination facility, a co-located data center, and associated components to provide up to 25,000 afy of potable water and data transmission and storage services. This alternative is being developed to meet a regional need for water, and under this Alternative, CalAm would be one of several customers, or off-takers, of the supply. CalAm would decommission the test slant well at CEMEX, and purchase water from the DeepWater Desalination Project to serve the needs of their customers in the Monterey District.

Alternative 3 would meet all of the Project objectives and produce the required volume of product water. The alternative includes an open-water intake and the placement of ballast rock on the seafloor, and the desalination facilities would be co-located with a data center. The alternative would produce more water than is needed for CalAm's Monterey District, though contracts would need to be negotiated for CalAm to secure water from the alternative. Product water pipeline would need to be constructed to connect the alternative to the Project's pipelines in the City of Marina. The CEQA and NEPA review for this alternative has been started, but it is not clear when it will be complete (no Draft EIR or EIS has yet been circulated) and when the alternative would be ready for consideration by the requisite permitting agencies. It is speculative whether the DeepWater Desalination Project would obtain the required permits for the project, and those permits would likely not be granted for years to come. In addition, under this alternative, the project sponsor of the DeepWater Desalination Project would need to agree to the terms of a water purchase agreement with CalAm that would subsequently need to be approved by the CPUC. Each of these elements would create increased permitting complexity that would delay CalAm's ability to serve its customers and to comply with legal mandates to find a substitute for Carmel River illegal diversions. Any further delay fails to meet the basic Project objectives and makes this alternative infeasible compared to the Project.

As for environmental impacts, the underwater features of Alternative 3 would have impacts on slope stability, landslides, and alteration of geologic resources or marine processes within MBNMS, and an increased impact on marine biological resources during construction and operations. Constructing Alternative 3 would also impact riparian habitat, critical habitat, and sensitive natural communities. Moreover, the desalination plant and data center would occur within 300 feet of a residence over a 24-month period, and would result in elevated pollutant emissions exposure, that would result in increased significant impacts compared to the Project. There are also substantial indirect growth inducing impacts; this alternative would provide substantially more water to the CalAm service area, because desalinated water would not need to be returned to the SVGB and more water would be available, creating the potential for growth.

The CPUC concludes that this alternative would generate numerous significant impacts above and beyond those of the Project and, therefore, is environmentally inferior to the Project such that the goals of CEQA would not be served by its selection.

e. ALTERNATIVE 4: PEOPLE'S MOSS LANDING WATER DESALINATION PROJECT AKA THE PEOPLE'S PROJECT

Alternative 4 is the People's Moss Landing Water Desalination Project ("People's Project"), which includes decommissioning the test slant well at CEMEX, the construction and operation of an open ocean intake system, a brine discharge system, and a 12 mgd desalination plant and associated components to provide 13,400 afy of water supply to meet the current and future needs

of the Monterey Peninsula area. This alternative would require an additional 6.5 miles of product water pipeline to connect to the Project's pipelines in the City of Marina.

The CEQA and NEPA review for this alternative has started, but it is not clear when it will be complete (no Draft EIR or EIS has yet been circulated) and when the alternative would be ready for consideration by the requisite permitting agencies. Each of these elements would create increased permitting complexity that would delay CalAm's ability to serve its customers and to comply with its legal mandates to find a substitute for Carmel River illegal diversions. Any further delay fails to meet the basic Project objectives and makes this alternative infeasible compared to the Project.

This alternative would also result in significant and unavoidable impacts from coastal erosion and degradation of marine geologic resources or oceanographic processes. There are also significant flood risks from tsunami and sea level rise compared to the Project due to the location of the desalination facility, and coastal erosion from the facility siting. The construction of Alternative 4 would result in an increased impact on marine biological resources and would result in a greater potential impact on marine species, natural community, or habitat during operations. This impact is an increased impact compared to the Project. Installing the open ocean intake, outfall pipeline and diffuser, and laying intake and brine discharge pipelines on the seafloor, ballasted with concrete collars and protected with riprap armoring, would also have a significant and unavoidable impact on water quality. Short-term emissions associated with construction could contribute to an exceedance of a state and/or federal standard for ozone, NO_2, and/or PM10, and has the potential to result in a violation of an air quality standard. This alternative would also occur within close proximity to sensitive receptors, creating significant and unavoidable impacts.

Even during operations, discharges and increased salinity would create an impact to water quality that would be significant and unavoidable compared to the Project. There are also indirect growth inducing impacts because this alternative would provide more water to the Monterey District service area and desalinated water would not need to be returned to the SVGB and more water would be available, creating the potential for growth. Therefore, the CPUC concludes that the Project is environmentally superior to this Alternative such that the goals of CEQA would not be served by this selection.

f. ALTERNATIVE 5B: REDUCED PROJECT 6.4 MGD DESALINATION PLANT – INTAKE SLANT WELLS AT POTRERO ROAD

Alternative 5b is a variation of the MPWSP: it includes the decommissioning of the test slant well at CEMEX and the construction and operation of the 6.4 mgd Project, with the seven intake wells at Potrero Road (the same location as Alternative 1, with fewer wells).

This alternative would not meet Project's objectives because the 6.4 mgd Project alone would not produce enough supply to meet the annual or peak demands in CalAm's Monterey District. However, if the PWM Project is operational and able to deliver water to CalAm, this alternative would meet Project objectives.

The hydrogeology of the Potrero Road area makes it such that Alternative 5b would draw a greater volume of water from the SVGB than the Project. In the event that the Salinas Valley Return Water obligation is 12 percent (the highest return value simulated), Alternative 5b would meet the need for replacement supplies and would meet peak month demand, but limited supply

would be available for other uses, including accommodating tourism demand under recovered economic conditions and development of legal lots of record.

Similar to Alternative 1, pumping from slant wells at Potrero Road under Alternative 5b would result in drawing groundwater that would otherwise flow to recharge the Elkhorn Slough or draw surface water directly from the Elkhorn Slough. This would be an increased level of impact compared to the Project, because it would have a significant and unavoidable impact on marine biological habitat and associated species, riparian habitat, critical habitat, or other sensitive natural communities, particularly the steelhead habitat in Elkhorn Slough. Moreover, Alternative 5b would be infeasible and would fail to meet the Project objectives to the same degree as the Project because it would fail to develop a reliable water supply for the Monterey District and accommodate tourism demand and legal lots of record. Furthermore, because of the potential for a greater amount of water needing to be returned to the Salinas Valley Groundwater Basin, the cost of product water could be higher to CalAm customers such that Alternative 5b would not be economically viable.

These impacts make this Alternative infeasible and would fail to meet the Project objectives to the same degree as the Project, especially because the Project would not generate the significant and unavoidable impact to a key biological resource. The CPUC concludes that this alternative would generate significant impacts above and beyond those of the Project and, therefore, is environmentally inferior to the Project such that the goals of CEQA would not be served by its selection.

Therefore, the CPUC concludes that the No Project/No Action Alternative and Alternatives 1 through 4 and 5b are infeasible and/or environmentally inferior to the Project.

g. EXPANDED PURE WATER MONTEREY PROJECT

Based upon testimony and data provided to the CPUC by parties to the MPWSP proceeding, Monterey One Water is considering the potential to expand the PWM Project from its approved 5 mgd size to 7 mgd (PWM Expansion). Monterey One Water has suggested the PWM Expansion as an interim solution to supply water to CalAm customers in the event that implementation of the Project desalination facility is delayed considerably. Some have suggested that the PWM Expansion could be available as necessary for CalAm to secure water to meet the project objectives, either entirely (substituting for the Project) or partially (allowing for a smaller desalination plant than the Project's 6.4 mgd plant). A document titled "Progress Report on Pure Water Monterey Expansion" prepared by Monterey One Water, dated May 10, 2018 (PWM Expansion Progress Report) details the status of and potential for the PWM Expansion and was submitted by Monterey One Water on May 11, 2018. For myriad independent reasons summarized below, the CPUC finds that, while it may be a worthwhile endeavor and could possibly satisfy short-term needs in the future or be part of CalAm's long-term water supply portfolio, the PWM Expansion is not a feasible alternative that would meet the project objectives and be environmentally superior to the Project such that it should be considered a feasible alternative to approving the Project at this time.

When the CPUC approved the Water Purchase Agreement to secure 3,500 afy of water from the PWM Project for CalAm, the CPUC applied nine criteria to evaluate the viability of the PWM Project and the reasonableness of the WPA. Those nine criteria remain applicable to any consideration of the PWM Expansion, yet the PWM Expansion Progress Report acknowledges that the PWM Expansion does not currently satisfy all of those nine criteria. Thus, it is not ready for consideration as an alternative.

Monterey One Water has not approved the PWM Expansion, nor has it formally begun an environmental review and permitting process for the PWM Expansion. The PWM Expansion Report includes a best-case schedule for that process ending in March 2019, contingent on Monterey One Water having already received funding for soft costs. The PWM Expansion Progress Report states that funding for continued work on the PWM Expansion is contingent on further action by the CPUC, such that the schedule outlined in the PWM Expansion Progress Report has apparently not been initiated and thus may be no longer accurate. The fact that the CEQA and NEPA processes have not begun for the PWM Expansion (indeed, NEPA review for the original PWM Project is not yet complete) indicate that the timelines for providing water outlined in the CDOs would not be met by this option. Further, while some have asserted that the CDO milestones may be amended or not enforced, there is insufficient certainty and evidence to support such an assumption. Any suspension of or changes to the CDO is outside the CPUC's jurisdiction and control; thus, any alternative that relies upon suspension of or changes to the CDO milestones is legally infeasible. In addition, the PWM Expansion would necessitate additional agreements (concerning, e.g., funding and water allocations) between Monterey One Water and the Monterey County Water Resources Agency that have not yet been developed and thus are speculative. The PWM Expansion Project was raised late in the Project consideration process and after public review of the EIR/EIS; its implementation is remote and speculative. As such, it is not now a feasible alternative to the Project.

Importantly, the PWM Expansion Progress Report indicates that the PWM Expansion would satisfy the basic and key purposes of the Project (i.e., sufficient and reliable water supply) only in conjunction with construction of a desalination plant of some size within five to fifteen years. Thus, the PWM Expansion would not substitute for a desalination plant, but would merely delay it and possibly (but not certainly) enable it to be smaller or to be operated differently. The PWM Expansion fails to qualify as a project alternative under CEQA.

Some parties to this proceeding have expressed concern over the quality of water that would be produced by the PWM Expansion in light of new water sources, such as agricultural runoff water. While the PWM Expansion Progress Report states that, after treatment, the water would meet or exceed drinking water standards, there has yet been no environmental analysis of this key technical feasibility issue. In addition, there is not at this juncture sufficient certainty concerning short- and long-term availability of source water supplies for the PWM Expansion. These technical feasibility concerns preclude the Commission from finding, based on the evidence at hand, that the PWM Expansion is a feasible alternative to satisfy the basic objectives of the Project.

Much of the source water for the PWM Expansion is projected to be storm water, and the PWM Expansion Progress Report source water numbers assumed a normal or wet year. While there would be a drought reserve, there is at least some uncertainty and variability as to the availability of water to support the PWM Expansion. CalAm needs a reliable and consistent water source to meet project objectives and the PWM Expansion would not satisfy this key objective (upon which numerous other project objectives rely).

As indicated in the PWM Expansion Progress Report, funding has not yet been secured for the soft costs (e.g., environmental review and permitting) or construction costs for the PWM Expansion. In addition, the CPUC has not analyzed the rates that would need to be charged to CalAm customers if water were secured from the PWM Expansion. The PWM Expansion Progress Report indicates that if the PWM Expansion were constructed before the desalination facility were built, CalAm would need to construct three extraction wells and associated pipelines, with one of such wells being necessary as a backup well in order to satisfy CalAm

system redundancy requirements. However, the costs submitted with the PWM Expansion Progress report assume that only two wells would be built. For these multiple reasons, the economic viability of the PWM Expansion is uncertain, which also raises timing and other key project objective issues.

Furthermore, there is no evidence to indicate that the PWM Expansion (on its own or, most likely with a later-constructed desalination plant) would reduce significant environmental effects of the Project. For this reason alone, it need not be considered as a Project alternative at this juncture. In addition, the PWM Expansion would not result in the benefit of supplying reliable, potable water to the community of Castroville, as would occur with the Project.

On these bases, though its exploration may have merit as an interim solution if the Project desalination facilities are delayed or as a part of CalAm's long term water supply portfolio, the PWM Expansion is neither a feasible nor an environmentally superior alternative to the Project.

h. MCWD SALE OF WATER TO CALAM

MCWD has indicated that it may be willing to sell to CalAm approximately 774 afy of water from the PWM Project for use in lieu of Seaside Basin groundwater pumping during the Seaside Basin replenishment period. This alternative is considered unable to meet the basic Project objectives and infeasible on the following independent bases: (a) the MCWD proposal involves only a relatively small amount of water insufficient to substitute for the Project or to make the Project smaller in size, (b) the water would be available to CalAm only on a short-term basis and thus does not provide a permanent and reliable water source, and (c) there is no proposed agreement for such sale before the CPUC, so that the CPUC cannot judge the financial and policy terms of any such water purchase agreement. In addition, there is no evidence that this option would eliminate or reduce any significant effects of the Project, so it is not environmentally superior to the Project. MCWD's proposal surfaced late in the Project environmental review and consideration process, and is remote and speculative.[5] The CPUC finds that this alternative is not viable.

i. SMALLER REDUCED CAPACITY ALTERNATIVE

Some parties have urged the CPUC to consider a further reduced capacity desalination alternative, one smaller than 6.4 mgd. This is unwarranted because a further reduced capacity alternative would not meet the basic objectives of the project, nor would it avoid or substantially reduce significant environmental effects of the Project.

A smaller desalination plant would fail to meet the basic project objectives and thus is not feasible. Given that each desalination unit is 1.6 mgd in size, the next reduced desalination plant size would be 4.8 mgd. Clearly, on its own, such a smaller desalination plant could not meet the basic objectives of the Project to supply existing and projected future demand within CalAm's Monterey service territory (see project objectives 1 through 7 on Final EIR/EIS page 5.1-5). Even when considered in conjunction with water expected to be supplied by the PWM project currently under

[5] MCWD has also criticized the EIR/EIS for not including its modest sale proposal in the No Project analysis or the cumulative impact analyses. First, the potential sale was raised after the EIR/EIS preparation process began. Also, there is no evidence that the water sale would occur without the Project because CPUC approval would be required and the potential water sale is not the subject of any pending CPUC proceeding. As such, it would not have been appropriate to include it in the No Project analysis. Similarly, it was not proposed when the cumulative project analytical methods and assumptions were developed, nor is it a reasonably foreseeable project, so it would not have been appropriate to include it within the EIR/EIS cumulative analyses. Finally, the inclusion of such a small amount of temporary water would not have altered the analysis or conclusions of the EIR/EIS.

construction, a 4.8 mgd desalination alternative would not provide water supply sufficient to meet demand consistent with the project objectives. Furthermore, prudent water planning and applicable water planning standards and guidelines require planning for all types of water years, including inevitable droughts. Under drought circumstances when little to no water is available from the ASR system, there would be insufficient supply to reliably meet, and be able to satisfy, peak month and peak day demands. Seasonal variability and potential drought conditions would exacerbate the water deficit of a 4.8 mgd desalination plant, even with PWM water available. (See Final EIR/EIS Section 8.2.13.5, pages 8.2-117 through 8.2-118 and Appendix L.) For these reasons, a smaller capacity desalination plant would not come close to meeting the basic project objectives and thus was not analyzed in detail in the EIR/EIS or considered by the CPUC.

In addition, a smaller capacity desalination plant was not analyzed or considered because it does not appear that such an option would avoid or substantially lessen any significant impacts of the Project. Many significant impacts would result from construction of the Project and those would remain as described for the Project since the same infrastructure would be constructed (pipelines, etc.), the desalination plant would be on the same site and the same five well pads would be needed at the CEMEX site. While operation of a 4.8 mgd desalination plant would require less energy and therefore generate fewer greenhouse gas emissions, the change may not be a substantial reduction in impacts and the Project would not have unavoidable adverse impacts in these areas in any event. As stated on page 8.5-663 of the Final EIR/EIS: "The magnitude of any potential adverse impacts resulting from the implementation of a desalination plant that is reduced in size from Alternative 5a and 5b would be reduced from what was evaluated for Alternatives 5a and 5b in EIR/EIS Section 5.5. However, it is expected that the classifications of all such impacts would remain the same as set forth in the EIR/EIS, as would the suggested mitigation measures." The purpose of exploring alternatives in an EIR/EIS is to seek and fully consider a reasonable range of options that would alleviate or substantially reduce significant environmental impacts of the Project. Since a further reduced capacity alternative would not meet this goal (and, as discussed above, would fall short of meeting project objectives), it need not be considered by the CPUC and is deemed infeasible.[6]

On the bases discussed herein, a further reduced capacity desalination alternative is neither a feasible nor an environmentally superior alternative to the Project.

XI. STATEMENT OF OVERRIDING CONSIDERATIONS

a. OVERRIDING CONSIDERATIONS

The CPUC has considered the Project's significant and unavoidable impacts set forth above, and weighed the benefits of the Project against the significant unavoidable environmental impacts under CEQA. The CPUC hereby finds that for the reasons set forth below, the Project's benefits and economic, legal, social, environmental and other considerations associated with the Project outweigh and make acceptable the unavoidable impacts identified above, and the CPUC adopts and makes this statement of overriding considerations. The CPUC further finds that each benefit specified below independently provides a sufficient basis to outweigh the Project's significant unavoidable impacts. The CPUC further finds that the benefits of the Project outweigh the benefits of any of the other alternatives examined, including the alternatives deemed infeasible in Section X above. The CPUC specifically finds that the benefits of the Project (some of which

[6] Note that the Final EIR/EIS did indeed discuss a 4.8 mgd plant in myriad places and include data on such infeasible option. (See EIR/EIS Section 8.2.13.5, pages 8.2-117 through 8.2-118; EIR/EIS page 8.5-663; and Appendix L.)

extend beyond the CalAm Monterey service territory) outweigh the environmental impacts that the Project will have on sensitive receptors in communities outside of CalAm's Monterey service territory, including those within the City of Marina.

b. BENEFITS OF THE PROJECT

The expected benefits of the Project are:

1. The Project would provide adequate, reliable water supplies for customers in CalAm's Monterey District.

The Project would result in the provision of 7,167 afy of replacement water supplies for residents of the Monterey Peninsula. CalAm services 39,621 accounts, approximately 150,000 residents or 33% of the population of the County. These residents would particularly benefit from the Project. The Project will also allow residential, commercial (including tourism) and industrial activities to continue to exist and flourish within the CalAm's Monterey District and within the greater Monterey area.

2. Cease CalAm's illegal diversions from the Carmel River and meet its obligations under the State Water Board's CDOs.

The Project will ensure that CalAm complies with its legal obligations under the State Board's CDOs to meet the key milestones in the CDOs, and ultimately terminate its unlawful diversions from the Carmel River. Under the CDOs, if CalAm were unable to demonstrate tangible process in developing an alternative water supply that would enable it to reduce and terminate its unlawful diversions, the State Board would reduce CalAm's annual diversion limit. Therefore, this Project ensures that CalAm's service district will not experience severe water cutbacks, and allows CalAm to adhere to the milestones in the CDOs.

3. Cease extracting water beyond its allocated limit from the Seaside Groundwater Basin.

This Project will ensure that CalAm has alternative sources of water to supply its service area and will no longer need to over extract from the Seaside Groundwater Basin to meet demand. The alternative water source provided by this Project will allow CalAm to abide by the Court's adjudication and pay back its obligation to the Seaside Basin.

4. Protect and promote the Monterey economy.

Implementation of the Project will provide local and regional economic benefits to the Monterey Peninsula area. Construction will boost temporary new local employment opportunities, increased spending on construction materials, equipment, and services.

5. Ensuring long-term water supply in the Monterey Peninsula area will boost the region's economic vitality, particularly the County's "four pillars" – agriculture, tourism, education, and research, by substantially enhancing the reliability of water resources and water infrastructure. The Project will allow residential, commercial (including

tourism) and industrial activities to continue to exist and flourish within the greater Monterey area, benefitting those who live and work throughout the greater Monterey area (and not merely in the CalAm Monterey service territory). **Significant environmental benefits to the Carmel River.**

The Project would result in a reduction of CalAm's pumping of river subflows from the Carmel River by as much as 7,354 afy compared to existing conditions. By allowing this water to remain in the Carmel River, the Project will result in significant environmental benefits to habitat and wildlife and marine species.

6. Arrest seawater intrusion for the Salinas Valley Groundwater Basin.

Based on the groundwater modeling, the Project would be expected to retard future inland migration of the seawater intrusion front, by intercepting and capturing some of the seawater that currently migrates inland across the coastline. The Project would, therefore, facilitate the reduction of seawater intrusion in the Salinas Valley Groundwater Basin in the long term, and may actually improve the Basin's seawater intrusion issue.

7. Return component of the Project will supply reliable and clean municipal water for Castroville.

The Castroville Community Services District ("CCSD") provides municipal and domestic water service to the Town of Castroville and currently relies on about 780 afy of groundwater from the SVGB to meet Castroville's water demands, and increasingly has experienced water supply challenges because the water is getting saltier. In order to fulfill its SVGB return water obligation, CalAm would make return water available for other water suppliers, including CCSD, rather than pumping groundwater from the SVGB. Castroville can rely on this clean municipal water to service its residents.