Potential Acquisition of Monterey Water System and District Boundary Adjustment

Draft Environmental Impact Report

prepared by

Monterey Peninsula Water Management District
5 Harris Court, Building G
Monterey, California 93940
Contact: David Stoldt, General Manager

prepared with the assistance of

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Acronyms and Abbreviations

°C	degrees Celsius
2015 AQMP	2012-2015 Air Quality Management Plan
AADT	annual average daily traffic
AB	Assembly Bill
ADT	average daily traffic
AF	acre-feet
AFY	acre-feet per year
AMBAG	Association of Monterey Bay Area Governments
American Water	American Water Works Company, Inc.
AQMD	Air Quality Management District
ASR	Aquifer Storage and Recover
ATP	Active Transportation Plan
avg	average
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standard
CalAm	California American Water
Cal.App.	California Appellate Reports
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CDO	cease and desist order
CH_4	methane
CIFP	Capital Improvement and Financing Plans
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COVID-19	Coronavirus 2019
CPUC	California Public Utilities Commission
District	Monterey Peninsula Water Management District
DMM	Demand Management Measures
DWR	California Department of Water Resources
EIR	Environmental Impact Report

EIS	Environmental Impact Statement
EF	emission factor
EO	Executive Order
FOB	Field Operations Branch
GHG	greenhouse gas
gpm	gallons per minute
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
GWP	global warming potential
HFC	hydrofluorocarbon
HA	Hydrologic Area
HR	Hydrologic Region
HU	Hydrologic Unit
hr	hour
IPCC	Intergovernmental Panel on Climate Change
LAFCO	Local Agency Formation Commission
LOS	Level of Service
$\mu g/m^3$	micrograms per cubic meter
MBARD	Monterey Bay Air Resources District
MBCP	Monterey Bay Community Power
MCHD	Monterey County Health Department
MCWRA	Monterey County Water Resources Agency
MGD	million gallons per day
MMT	million metric tons
MOU	memorandum of understanding
MPO	Metropolitan Planning Organization
MPWSP	Monterey Peninsula Water Supply Project
MST	Monterey Salinas Transit
MT	metric ton
MTP/SCS	Metropolitan Transportation Plan/Sustainable Communities Strategy
MWS	Monterey water system
M1W	Monterey One Water
N_2O	nitrous oxide

n/a	not applicable
NAAQS	National Ambient Air Quality Standard
NEPA	National Environmental Protection Act
NPDES	National Pollutant Discharge Elimination System
NCCAB	North Central Coast Air Basin
NO_2	nitrogen dioxide
NO_X	nitrogen oxide
NOP	Notice of Preparation
O_3	ozone
O&M	operation and maintenance
Pb	lead
PFC	perfluorocarbon
PG&E	Pacific Gas & Electric
PM_{10}	particulate matter measuring 10 microns or less in diameter
$PM_{2.5}$	particulate matter measuring 2.5 microns or less in diameter
ppm	parts per million
PSD	Prevention of Significant Deterioration
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SAFE	Safer Affordable Fuel-Efficient
SB	Senate Bill
SBX7-7	Water Conservation Act of 2009
SCS	Sustainable Communities Strategy
SDWA	Safe Drinking Water Act
SF_6	sulfur hexafluoride
SWRCB	State Water Resources Control Board
SGMA	Sustainable Groundwater Management Act
SIP	State Implementation Plan
SO_2	sulfur dioxide
SO_X	sulfur oxide
SR	State Route
SWRCB	California State Water Resources Control Board
TAC	toxic air contaminant

TAMC	Transportation Agency for Monterey County
U.S.	United States
U.S. EPA	United States Environmental Protection Agency
USC	United States Code
UWMP	Urban Water Management Plan
VMT	vehicle miles traveled
VOC	volatile organic compound
WDR	Waste Discharge Requirements
WSA	Water Supply Assessment

Executive Summary

This document is an Environmental Impact Report (EIR) analyzing the environmental effects of the proposed Potential Acquisition of Monterey Water System and District Boundary Adjustment Project (proposed project or project). This section summarizes the characteristics of the proposed project, alternatives to the proposed project, and the environmental impacts and mitigation measures associated with the proposed project. The Monterey Peninsula Water Management District (District) is proposing to acquire from California American Water (CalAm) the Monterey Water System. The project involves acquisition and operation of the Monterey Water System (MWS) as well as an adjustment to the District's service boundaries.

Project Synopsis

Project Proponent/Lead Agency

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Project Description

This EIR has been prepared to examine the environmental effects of the Potential Acquisition of Monterey Water System and District Boundary Adjustment project. The following is a summary of the full project description, which can be found in Section 2, *Project Description*.

Project Location

The project area is within Monterey County and includes the MWS, currently served by CalAm. This area is approximately 55 square miles and includes approximately 40,000 customer connections. The project area is located within the Monterey Peninsula region and is bordered by California State University – Monterey Bay and the former Fort Ord to the north, unincorporated Monterey County to the east, the Big Sur coast and the Santa Lucia Mountains to the south, and the Pacific Ocean to the west. Customer connections in the project area are within the Cities of Carmel-by-the-Sea, Del Rey Oaks, Monterey, Pacific Grove, Sand City, and Seaside, and unincorporated areas of Monterey County.

Project Background

In November 2018, Monterey Peninsula voters passed Measure J, which added Rule 19.8 to the District's Rules and Regulations, instructing the District to undertake a feasibility study on the public

take-over of CalAm's MWS. In August 2019 the District released "A Plan to Adopt and Implement a Policy to Secure and Maintain Public Ownership of All Water Production, Storage and Delivery System Assets and Infrastructure Providing Services within the Monterey Peninsula Water Management District Territory."

Project Characteristics

The proposed project would involve the District acquiring the MWS that currently serves the District's service area as well as approximately 43 new residential connections currently served by CalAm that would be annexed into the District's service area. The project also includes the subsequent operation of the MWS by the District. The District would operate and maintain the system from CalAm's existing main office, operations center, and corporate yard as well as the existing District administrative building. No changes or expansion to the physical MWS or associated water rights are proposed.

Project Objectives

The underlying purpose of the proposed project is for the District to acquire, operate, and maintain the MWS. The objectives of the proposed project are to implement the Purpose approved by the electorate in Measure J:

> "…to ensure the long-term sustainability, adequacy, reliability, cost-effectiveness and quality of water service within the Monterey Peninsula Water Management District area, to lower the cost of service to ratepayers, to promote and practice sustainable water management measures, and to establish public ownership of water system assets by establishing regulations requiring the District to take affirmative action, to the extent financially feasible, to acquire the water system assets owned and operated by the California American Water Company that currently provide water service to the District and its ratepayers."

The Purpose of Measure J furthered by this proposed project shall include the following aspects:

- Allow the citizens of the Monterey Peninsula to independently own and operate the water production and distribution system serving customers presently served by the CalAm's MWS;
- Provide greater transparency and accountability to residents and businesses on the Monterey Peninsula regarding potable water supplies, as well as increased customer service and reliability;
- Enhance customer service and responsiveness to affected CalAm customers;
- Provide greater local control over the rate setting process and rate increases;
- Provide direct access to locally elected policy makers for water operations;
- Allow the District to pursue funding and other financing alternatives available to public agencies for future infrastructure needs, including grants and financing options not available to a CPUC-regulated, privately-owned utility; and,
- Ensure better coordination amongst local governmental decisions involving land use, emergency services, policy, the location and need for capital improvements, and overall planning in the water context.

Alternatives

As required by the California Environmental Quality Act (CEQA), this EIR examines alternatives to the proposed project. Studied alternatives include the four alternatives described below. For full

descriptions and analysis of alternatives, refer to Section 6, *Alternatives*. Based on the alternatives analysis, none of the alternatives were determined to be environmentally superior to the proposed project. Environmental effects would be similar across all alternatives, including the proposed project, with some impacts greater and some less, depending on the resource topic. Of the alternatives considered, Alternative 3 is considered the environmentally superior alternative.

- Alternative 1: No Project Alternative
- Alternative 2: No Boundary Adjustment Alternative
- Alternative 3: Private Third-Party Operator Alternative
- Alternative 4: No Boundary Adjustment and Third-Party Operator Alternative

Alternative 1 (No Project Alternative) assumes that the proposed acquisition of the MWS by the District would not occur. Specifically, the District would not acquire CalAm's Main, Bishop, Hidden Hills, and Toro water systems and associated assets, including water systems and production wells; utility plants; vehicles and equipment; water rights; water supply contracts; records, books, and accounts; and, easements, and rental property. In addition, since the District would not acquire the MWS, a boundary adjustment to annex service areas into the District would not be necessary and, therefore, would not occur under Alternative 1. Under this alternative, CalAm would continue to operate and maintain the MWS from its existing facilities, including the construction and operation of the Monterey Peninsula Water Supply Project (MPWSP) Desalination Plant.[1] The No Project Alternative would not achieve any of the project objectives because it would not allow the District to implement the purpose approved by the electorate in Measure J.

Alternative 2 (No Boundary Adjustment Alternative) assumes that the proposed acquisition of the MWS by the District would proceed but that the application to annex areas outside of the District's boundaries would not be approved by the Local Agency Formation Commission of Monterey County (LAFCO). Instead, the District's boundaries would remain the same. Areas outside of the District's boundaries that would be annexed under the proposed project - including approximately 33 residential connections within the Main component of the MWS in the Yankee Point area and approximately 10 residential connections in the Hidden Hills component of the MWS - would still be acquired from CalAm by the District under this alternative. However, rather than through an annexation, service by the District would occur under a contract agreement. As a result, operation and maintenance of these areas outside the District would be the same as described under Section 2, *Project Description*; however, the governance structure would be different.

Under Alternative 2, project objectives would be met in areas that are currently within the District service area. However, areas outside of District boundaries would not be annexed, and therefore, customers in those areas would not be allowed to vote for District Board of Directors and would not have direct contract through their municipal elected officials as they would if those areas were annexed. As a result, Alternative 2 would not meet the following objectives for customers outside of District boundaries: provide direct access to locally elected policy makers for water operations; allow the District to pursue funding and other financing alternatives available to public agencies for future infrastructure needs, including grants and financing options not available to a CPUC-regulated, privately-owned utility; and, ensure better coordination amongst local governmental decisions involving land use, emergency services, policy, the location and need for capital improvements, and overall planning in the water context. . However, Alternative 2 would meet the

[1] If approved by the National Environmental Protection Agency lead agency, the Monterey Bay National Marine Sanctuary.

following objectives for citizens outside the District boundaries: provide greater transparency and accountability to residents and businesses on the Monterey Peninsula regarding potable water supplies, as well as increased customer service and reliability; enhance customer service and responsiveness to affected CalAm customers; and provide greater local control over the rate setting process and rate increases. For customers already in the District boundaries, all the objectives would be met, similar to the proposed project. For customers already in the District boundaries, all the objectives would be met, similar to the proposed project.

Alternative 3 (Private Third-Party Operator Alternative) assumes that the proposed acquisition of the MWS by the District would proceed but that CalAm would not make its existing employees available for integration into the District. Instead a private third-party operator would be contracted by the District to operate and maintain the system. The third-party operator would work out of the same operations and maintenance facilities and require the same number of employees to service the MWS (approximately 87 employees) as outlined in Section 2, *Project Description*. Further, employees hired by the third-party contractor would be domiciled locally (Stoldt 2020). The size of the system and the associated infrastructure would be the same for Alternative 3 as under the proposed project and no substantial construction would occur. Therefore, operation and maintenance of the system would remain the same as described in Section 2, *Project Description*, just performed by a third-party operator and not the District. This alternative still would achieve all of the stated project objectives, since the District would still acquire the system and operation and maintenance would remain the same. However, the water pricing reductions would not be as pronounced, due to the additional fees required to hire a third-party operator. Therefore, the purpose stated in Measure J to "to ensure the long-term sustainability, adequacy, reliability, cost-effectiveness and quality of water service within the Monterey Peninsula Water Management District area, to lower the cost of service to ratepayers…" would not be as fully realized as for the proposed project.

Alternative 4 (No Boundary Adjustment and Third-Party Operator Alternative) assumes that the proposed acquisition of the MWS by the District would proceed, but that the application to annex areas outside the District's boundaries would not be approved by LAFCO and the District would hire through a private third-party operator to operate and maintain the system. Instead, similar to Alternative 2, the District's boundaries would remain the same and areas outside the District would be served under contract agreement. In addition, similar to Alternative 3, a third-party operator would be contracted by the District to operate and maintain the system, including both areas within the District service area and areas outside the District's service area served under contract. Under this alternative, operation and maintenance of the system would remain the same. Therefore, the same number of employees would be retained by the third-party contractor as under the proposed project. Further, employees hired by the third-party contractor would be domiciled locally. Similar to Alternative 2, this alternative would not fully realize all of the project objectives because it would not allow the District to fully implement the purpose approved by the electorate in Measure J in these areas that are not annexed. Additionally, similar to Alternative 3, water pricing reductions would be less pronounced. Therefore, the purpose stated in Measure J to "to ensure the long-term sustainability, adequacy, reliability, cost-effectiveness and quality of water service within the Monterey Peninsula Water Management District area, to lower the cost of service to ratepayers…" would not be as fully realized as for the proposed project.

Areas of Known Controversy

The proposed project is the result of Monterey Peninsula voters passing Measure J, as described above and described in more detail in Section 2, *Project Description*. While 23,757 (55.81 percent) voters were in favor, 18,810 (44.19 percent) were opposed (Monterey County 2018). The project would require the purchase of the MWS, which CalAm has not offered for sale. Therefore, the project would potentially involve establishing a price and procedure for the proposed transfer of assets from CalAm to the District. Additionally, water supply and use in the Monterey Peninsula region has historically been the subject of heightened public interest and disagreement. There is known controversy regarding the assets and water rights that the District could obtain through the proposed project, including the proposed construction of the MPWSP Desalination Plant north of the City of Marina. However, that project has undergone a separate environmental review and the environmental effects of the MPWSP are not within the scope of this EIR. Refer to Section 2, *Project Description*, for a full description of MPWSP characteristics.

For a description of additional issues raised during the Notice of Preparation comment period, refer to Table 1-1 in Section 1, *Introduction*.

Issues to be Resolved

Responses to the Notice of Preparation of a Draft EIR and input received at the EIR scoping meeting are summarized in Table 1-1 found in Section 1, *Introduction*.

Issues Not Studied in Detail in the EIR

Section 1.4 lists the environmental topics evaluated in this EIR. Detailed evaluation in this EIR was not necessary for all environmental checklist items. Items that were determined not to be significant are discussed in Section 4.7, *Effects Found Less Than Significant*, and include aesthetics, agriculture and forestry resources, biological resources, cultural resources, energy, geology and soils, hazards and hazardous materials, land use and planning, mineral resources, population and housing, public services, recreation, tribal cultural resources, and wildfire, as well as three criteria for hydrology and water quality and three criteria for utilities and service systems.

Summary of Impacts and Mitigation Measures

Table ES-1 summarizes the environmental impacts of the proposed project, proposed mitigation measures, and residual impacts (the impact after application of mitigation, if required). Impacts are categorized as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the CEQA Guidelines.
- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under §15091 of the CEQA Guidelines.
- **Less than Significant.** An impact that may be adverse, but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.

- **No Impact:** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Cumulative impacts are addressed at the end of each resource section, Sections 4.1 through 4.6.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measure(s)	Residual Impact
Air Quality		
Impact AQ-1. The proposed project would not conflict with or obstruct implementation of the Monterey Bay Air Resources District (MBARD) 2015 Air Quality Management Plan. No impact would occur.	None required	No Impact
Impact AQ-2. The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the MBARD region is in nonattainment under applicable federal or state ambient air quality standards. Therefore, impacts would be less than significant.	None required	Less than significant
Impact AQ-3. The proposed project would not expose sensitive receptors to substantial concentrations of carbon monoxide (CO) or toxic air contaminants (TACs). Therefore, impacts would be less than significant.	None required	Less than significant
Impact AQ-4. The proposed project would not create objectionable odors that would adversely affect a substantial number of people. No impact would occur.	None required	No Impact
Greenhouse Gas Emissions		
Impact GHG-1. The proposed project would generate greenhouse gas (GHG) emissions that may have a significant impact on the environment, and implementation of Mitigation Measure GHG-1 would be required. Impacts would be less than significant with mitigation incorporated.	**GHG-1 Greenhouse Gas Reduction Plan for Operational Emissions.** The District shall prepare and implement a Greenhouse Gas Reduction Program that reduces the net increase in GHG emissions of 62.7 metric tons of carbon dioxide equivalents to net zero (i.e., carbon neutral) over the operational life of the proposed project. To meet the net zero requirement, the District must reduce its operational GHG emissions by 62.7 metric tons of carbon dioxide equivalents per year. Potential options include, but would not be limited to, those listed in Table 4.2-2 in Section 4.2, *Greenhouse Gas Emissions*.	Less than significant with mitigation
Impact GHG-2. The proposed project would be consistent with plans, policies, or regulations adopted for the purpose of reducing GHG emissions, and implementation of mitigation measure GHG-1 would be required. Impacts would be less than significant with mitigation incorporated.	**GHG-1 Greenhouse Gas Reduction Plan for Operational Emissions.** *Mitigation Measure GHG-1* text is included above under Impact GHG-1.	Less than significant with mitigation

Impact	Mitigation Measure(s)	Residual Impact
Hydrology and Water Quality		
Impact HYD-1. The proposed project would alter the entity that operates the existing MWS, which could potentially alter the rate structure and fee charged for water service; if a reduction in pricing occurs, water use in the area could potentially increase because water use is linked to cost. However, the operator of the system would be required to comply with the Seaside Groundwater Basin Adjudication Decision, State Water Resources Control Board Order No. WR 2016-0016, and water use reduction strategies and goals contained within 2018 Water Conservation Legislation and the California Water Conservation Act of 2009. As a result, water use rates would continue to decline on a per capital basis regardless of potential changes in the system operator or water rate structures. Therefore, potential impacts to groundwater supply would be less than significant.	None required	Less than significant
Impact HYD-2. The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. This impact would be less than significant.	None required	Less than significant
Noise		
Impact N-1. The proposed project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project area in excess of local standards. Impacts would be less than significant.	None required	Less than significant
Impact N-2. The proposed project would not result in the generation of excessive groundborne vibration or groundborne noise levels. No impact would occur.	None required	No Impact
Impact N-3. The proposed project would not expose staff to excessive noise levels from the Monterey Regional Airport. Impacts would be less than significant.	None required	Less than significant
Transportation		
Impact T-1. The proposed project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Impacts would be less than significant.	None required	Less than significant
Impact T-2. The project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). Impacts would be less than significant.	None required	Less than significant

Impact	Mitigation Measure(s)	Residual Impact
Impact T-3. The proposed project would not substantially increase hazards due to a design feature or incompatible uses. No impact would occur.	None required	No Impact
Impact T-4. The project would not result in inadequate emergency access. No impact would occur.	None required	No Impact
Utilities and Service Systems		
Impact UTIL-1. The project would not require or result in the relocation or reconstruction of new or expanded water, wastewater treatment, or stormwater drainage and would not generate wastewater treatment demand in excess of existing supplies. Impacts would be less than significant.	None required	Less than significant
Impact UTIL-2. The project would not result in substantial new or increased water demands in the project area. Impacts would be less than significant.	None required	Less than significant

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1 Introduction

This document is an environmental impact report (EIR) for the proposed Potential Acquisition of Monterey Water System and District Boundary Adjustment (proposed project). The project is proposed by the Monterey Peninsula Water Management District (District) as the Lead Agency and has been prepared in accordance with the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the *State CEQA Guidelines* (14 Cal. Code Regs. Section 15000 et seq.). As dictated by the electorate in November 2018 via approval of ballot Measure J, the District proposes to acquire California American Water Company's (CalAm) Monterey Water System (MWS) that currently serves the majority of the incorporated area of the District's service area, as well as some outlying areas located in a portion of unincorporated Monterey County. The project is described in detail in Section 2, *Project Description*.

This EIR was prepared by professional planning consultants in conjunction with District staff. This EIR contains information necessary to support the District's CEQA findings that will be made only after the District Board of Directors considers the proposed project and the administrative record. The District Board of Directors' findings will be incorporated in a stand-alone Resolution that will be presented as part of the agenda packet when this item moves forward for consideration.

This section discusses (1) the project and EIR background; (2) the legal basis for preparing an EIR; (3) the EIR public noticing and scoping process; (4) the scope and content of the EIR; (5) the type of EIR; (6) the lead, responsible, and trustee agencies; and (7) the environmental review process required under CEQA. The proposed project is described in detail in Section 2, *Project Description*.

1.1 Project Background

The District is proposing to acquire the CalAm MWS that currently serves a 55 square-mile area, a majority of which is located within the District's service area, as well as some outlying areas located outside the District's current service area in unincorporated Monterey County. Outlying areas specifically include approximately 33 connections located directly south of the District's boundary at Yankee Point and approximately 10 connections located immediately adjacent and to the east of the District boundary at Hidden Hills. The District service area and project boundaries are shown in Figure 2-2 in Section 2, *Project Description.* Because the project includes areas outside of the current service area, the proposed project would also include an annexation of these areas into the District's service area. Connections to the MWS located outside the District boundary would be served by the District and no change in service to those connections would occur as a result of the proposed project.

The acquisition of CalAm's MWS would include all associated assets, (i.e., real, intangible, and personal property), including, but not limited to:

- Water systems and production wells
- Utility plants
- Vehicles and equipment
- Water rights
- Water supply contracts

- Records, books, and accounts
- Land, easements, and rental property

In addition to the District's acquisition of the MWS, the proposed project includes the District's subsequent operation of the MWS. The District is proposing only to acquire and operate the existing system, and is not proposing changes or expansion to the physical MWS or to the associated water rights, nor is the District proposing any changes to the manner of operation of the MWS or the exercise of the associated water rights. The District would operate and maintain the system from CalAm's existing main office, located at 511 Forest Lodge Road #100 in Pacific Grove, as well as some additional duties from the District's existing administrative building, which is located at 5 Harris Court, Building G in Monterey. Maintenance activities would occur at CalAm's existing operations center and corporate yard located adjacent to the David Avenue Reservoir in Pacific Grove, between Hillcrest Avenue and David Avenue on Carmel Avenue.

As previously stated, the MWS is currently owned and operated by CalAm, a wholly-owned subsidiary of American Water, a Class A investor-owned public utility regulated by the California Public Utilities Commission (CPUC). In 1965 CalAm purchased the Monterey Peninsula's water system and water rights from California Water and Telephone Company and has been operating throughout the Monterey Peninsula for 55 years (CalAm 2016). CalAm currently holds water rights to supply the system as well as infrastructure that allows for the production, distribution, and delivery of water supplies within its service area.[1] CalAm's water supply systems in Monterey County are comprised of the MWS and several other small stand-alone systems scattered throughout Monterey County—Ralph Lane, Ambler Park, Toro, Chualar, and Garrapata (collectively, the "Central Satellites" or "Satellite Systems"). CalAm also owns and operates several small scattered wastewater systems in various locations throughout the County.

The proposed project only includes the MWS, a majority of which is located within the District boundaries. Existing MWS facilities, infrastructure, and land include, but not limited to: lease of the Sand City Desalination Plant, 33 water wells, six water treatment facilities, 614 miles of pipeline, the Monterey Pipeline and Pump Station, 74 pump stations and one planned pump station (Carmel Valley Pump Station), 108 water storage facilities, 117 assessor parcels with a total area of approximately 4,753 acres that generally support system infrastructure (e.g., groundwater wells and water storage tanks), and associated fire hydrants and distribution valves (District 2019). In addition, the MWS includes planned facilities associated with the Monterey Peninsula Water Supply Project (MPWSP) including the 6.4 million gallons per day Desalination Plant with sub-surface intake wells and related infrastructure improvements to convey source water to the MPWSP Desalination Plant, deliver product water, and dispose of brine.

The underlying purpose of the proposed project is for the District to acquire, operate, and maintain the MWS. The objectives of the proposed project are to implement the purpose approved by the electorate in Measure J:

> "…to ensure the long-term sustainability, adequacy, reliability, cost-effectiveness and quality of water service within the Monterey Peninsula Water Management District area, to lower the cost of service to ratepayers, to promote and practice sustainable water management measures, and to establish public ownership of water system assets by establishing regulations requiring the District to take affirmative action, to the extent financially feasible, to acquire the

[1] In light of the State Water Resources Control Board (SWRCB) mandated reductions to pumping from the Carmel River Basin, a number of water supply projects are proposed in order to provide sufficient supply to meet demand associated with the MWS. For more information pertaining to regional hydrologic setting and water services and supply, please see Section 4.3, *Hydrology and Water Quality,* and Section 4.6, *Utilities and Service Systems.*

water system assets owned and operated by the California American Water Company that currently provide water service to the District and its ratepayers."

The purpose of Measure J furthered by this proposed project shall include the following aspects:

- Allow the Monterey Peninsula to independently own and operate the water production and distribution system serving customers presently served by the CalAm MWS;
- Provide greater transparency and accountability to residents and businesses on the Monterey Peninsula regarding potable water supplies, as well as increased customer service and reliability;
- Enhance customer service and responsiveness to affected CalAm customers;
- Provide greater local control over the rate setting process and rate increases;
- Provide direct access to locally elected policy makers for water operations;
- Allow the District to pursue funding and other financing alternatives available to public agencies for future infrastructure needs, including grants and financing options not available to a CPUC-regulated, privately-owned utility; and,
- Ensure better coordination amongst local governmental decisions involving land use, emergency services, policy, the location and need for capital improvements, and overall planning in the water context.

1.2 Purpose and Legal Authority

In accordance with Section 15121 of the *State CEQA Guidelines* (California Code of Regulations, Title 14), the purpose of this EIR is to serve as an informational document that:

"…will inform public agency decision makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project."

Therefore, the EIR is an informational document for use by decision makers, public agencies, and the general public. It is not a policy document and does not set forth District policy about the desirability of the proposed project.

It is important to note the District does not acknowledge it is legally required to prepare this EIR. The District asserts its proposed actions do not meet the CEQA definition of a "project." Further, even if the District's actions were deemed to constitute a CEQA-defined "project," the District asserts that the activity would be exempt from CEQA review. The District also notes any physical changes in the environment attributable to differences in water rates are too speculative or unlikely to be considered reasonably foreseeable to require CEQA review. Nonetheless, the District has voluntarily caused this EIR to be prepared to inform public decision makers and the public generally regarding these proposed activities. No statement in this EIR is intended or should be construed to constitute an acknowledgment by the District the CEQA process is legally required.

1.3 Notice of Preparation and Scoping

The District implemented an extensive scoping process, which included noticing the public and holding a public scoping meeting. The scoping process for this EIR was formally initiated on April 6, 2020 with submittal of the Notice of Preparation (NOP) to the State Clearinghouse in compliance

with CEQA (State Clearinghouse No. 2020040069) for distribution to State agencies. The NOP was distributed for agency and public review for the required 30-day review period from April 6, 2020 to May 6, 2020. The NOP was also posted on the District website (https://www.mpwmd.net) and published in the Monterey Herald April 6, 2020 edition.

Scoping refers to the process employed to assist the lead agency in determining the focus and content of the analysis included in the EIR. Scoping solicits input on the potential topics to be addressed in an EIR, the range of project alternatives, and possible mitigation measures. Scoping establishes methods of assessment and selection of the environmental effects to be considered in detail. Tools used in scoping of this EIR included distribution of the NOP and a public scoping meeting.

The District conducted an EIR scoping meeting on April 21, 2020. Due to the Coronavirus (COVID-19) shelter-in-place regulations required throughout all of Monterey County in March and April 2020, an in-person meeting was not feasible. Therefore, the public meeting was held virtually via the Zoom platform. The meeting aimed to provide information about the proposed project to members of public agencies, interested stakeholders, and residents/community members. In order to ensure members of the public knew how to use the Zoom platform and comment during the meeting, an instructional document was provided on the District website and via email to the NOP mailing list four days prior to the meeting. During the Zoom meeting, members of the public were able to provide verbal comments using the In-Meeting Chat tool which were then read aloud to the meeting attendees; these comments are summarized below in Table 1-1 below.

The District received a total of six written comments during the public review period, in addition to comments received during the scoping meeting. The NOP is provided in Appendix A of this EIR, along with the NOP responses received. Table 1-1 summarizes the comments received in the comment letters and at the public scoping session and identifies the EIR section where the issues raised are addressed.

Table 1-1 NOP Comments and EIR Response

Commenter	Comment/Request	How and Where It Was Addressed
Agency Comments		
Local Agency Formation Commission of Monterey County (LAFCO)	Provides language for the Draft EIR's project description and/or sections pertaining to agency approvals section	Addressed in Section 2, *Project Description*
Native American Heritage Commission	States that the project will require compliance with Assembly Bill 52 and provides detailed information on compliance	Addressed in Section 4.7, *Effects Found Less Than Significant*
California State Parks	Requests that the project EIR identify any/all CalAm related projects that seek to utilize State Parks lands.	Addressed in Section 4.7, *Effects Found Less Than Significant*
Monterey County Regional Fire	Raises questions pertaining to MWS hydrant maintenance and frequency, annual flow testing in accordance with National Fire Prevention Association and Insurance Service Office. Also asks for maps and information related to exemptions and process to utilize assets for fire department training.	Addressed in Section 2, *Project Description,* Section 4.5, *Transportation* and Section 4.7, *Effects Found Less Than Significant*

Commenter	Comment/Request	How and Where It Was Addressed
California Department of Fish and Wildlife	Raises concerns on impacts due to operation and maintenance of the MWS on biological resources, specifically: ▪ Impacts to species in the project areas: the commenter recommends surveys and mitigation measures to address each of the species found in the project area ▪ Requests descriptions of all anticipated and reasonably foreseeable ground disturbance activities related to the project ▪ Requests clarification if the satellite systems are included within the project ▪ Impacts of fluctuating water rates on demand and as biological resources ▪ Impacts of project activities on the bed, bank, and channel of lakes, streams and associated wetlands ▪ Address how the project would affect existing water rights ▪ Lists recommendations for evaluating project-related impacts on nesting birds ▪ Recommends consultation with U.S. Fish and Wildlife Service if there are potential impacts to federally listed species ▪ Requests the District report any special status species and natural communities detected during project survey to the California Natural Diversity Database ▪ Payment of filing fees	Addressed in Section 2, *Project Description,* Section 4.3, *Hydrology and Water Quality*, Section 4.6, *Utilities and Service Systems* and Section 4.7, *Effects Found Less Than Significant*
Monterey County Resources Management Agency	Requests that the EIR address how the project would impact County infrastructure and regulatory responsibilities. Specifically, that the project description clarify what County infrastructure serves the project area and County involvement to operate and maintain the satellite water systems that would not be part of the acquisition. Further, the County suggests that the EIR analyze the project's consistency with applicable General Plans, area plans, and Local Coastal Programs.	Addressed in Section 2, *Project Description,* Section 4.1, *Air Quality Analysis,* Section 4.2, *Greenhouse Gas Emissions,* Section 4.3, *Hydrology and Water Quality,* Section 4.4, *Noise,* Section 4.5, *Transportation,* and Section 4.6, *Utilities and Service Systems*
State Clearinghouse	Acknowledges that the NOP comment period has closed and provides a link to state agency comment letters (shown above)	Addressed in Section 1, *Introduction*
Public Comments		
Carmel River Steelhead Association (letter dated 4/12/2020)	Expresses concern and opposition with holding a virtual scoping meeting (due to COVID-19 shelter-in-place)	Addressed in Section 1, *Introduction*

Commenter	Comment/Request	How and Where It Was Addressed
Carmel River Steelhead Association (letter dated 5/6/2020)	Raises concerns related to the following: ▪ The District's protection of steelhead in the Carmel River if there is a drought in the future ▪ Amount of water in the Carmel River and impacts to steelhead ▪ How would the project impact water policies on the Carmel River ▪ Position of the District on steelhead in the Carmel River	Addressed in Section 4.3, *Hydrology and Water Quality*, Section 4.6, *Utilities and Service Systems* and Section 4.7, *Effects Found Less Than Significant*
Brian LeNeve (letter received on 4/17/2020)	Expresses concern and opposition with holding a virtual scoping meeting (due to COVID-19 shelter-in-place)	Addressed in Section 1, *Introduction*
Brian LeNeve (letter received on 5/6/2020)	Raises concerns related to the following: ▪ Impacts of the project on the 1990 Water Allocation Program EIR ▪ Impacts of the project on the 5-year Mitigation Program which has continued to date ▪ Impacts to SWRCB Water Order 95-10 and the Cease and Desist Order ▪ Impacts to mitigation for steelhead and potential conflicts of interest ▪ Impacts to ASR I, ASR II and any further ASR projects ▪ Impacts to the transfer of the San Clement Property to BLM	Addressed in Section 4.3, *Hydrology and Water Quality*, Section 4.6, *Utilities and Service Systems* and Section 4.7, *Effects Found Less Than Significant*
Monterey Peninsula Taxpayers Association	Raises concerns pertaining to increased water usage due to adjustments in water rates	Addressed in Section 4.3, *Hydrology and Water Quality* and Section 4.6, *Utilities and Service Systems*
Margaret Thum	Raises concerns related to the following: ▪ Timing of the EIR and alternatives related to the MPWSP Desalination Plant ▪ Changes to District boundaries and required approvals by the legislature and local citizens ▪ Clear project description defining the project(s) ▪ Consider not pursuing the project as an alternative ▪ Consider not adjusting the District boundaries as an alternative ▪ Consider zoning impacts of the project, specifically how the project will impact current zoning and general plans, water restrictions, District rules, and fees ▪ Consider impacts of the District's water allocation system, rules and regulations on the project ▪ Consider project and proposed alternatives impacts on the environment	Addressed in Section 1, *Introduction,* Section 2, *Project Description,* Section 4.1, *Air Quality Analysis,* Section 4.2, *Greenhouse Gas Emissions,* Section 4.3, *Hydrology and Water Quality,* Section 4.4, *Noise,* Section 4.5, *Transportation,* Section 4.6, *Utilities and Service Systems,* Section 4.7, *Effects Found Less Than Significant, Section 5, Other CEQA Required Discussion,* and Section 6, *Alternatives*

Commenter	Comment/Request	How and Where It Was Addressed
	▪ Consider if the project will be carbon neutral ▪ Consider impacts of the project and alternatives on groundwater basins within and without the District boundaries ▪ Consider impacts of the project and alternatives on Monterey Bay ▪ Consider project impacts and alternatives on the Seaside Aquifer ▪ Considers the necessary equipment and development needed for project operation and maintenance ▪ Consider impacts on the environment of increased water usage ▪ Consider proposed rate structure and the impacts on water usage and the resulting impacts on the environment ▪ Consider impacts of the project and alternatives on health due to harmful chemicals ▪ Consider impacts of employee and consultant resources on the environment ▪ Consider if the District has sufficient financial resources to undertake the project and alternatives as well as mitigations	
Luke Coletti	Raised concerns related to multiple EIR analysis	Addressed in Section 1, *Introduction*
Scoping Meeting Comments	Raises concerns related to the following: ▪ Type of EIR and multiple analysis ▪ District boundaries and location of project components including the MPWSP Desalination Plant and satellite systems ▪ Impacts due to operation of the system ▪ Climate change impacts ▪ Environmental impacts due to rate changes ▪ Operation of the Sand City Desalination Plant ▪ Impacts to the Seaside water system ▪ Impacts related to the proposed Monterey Peninsula Water Supply Project ▪ Impacts due to acquisition of office and maintenance offices ▪ Impacts to sewer system ▪ Applications to the Local Agency Formation Commission of Monterey County ▪ Impacts to land use and planning	Addressed in Section 1, *Introduction,* Section 2, *Project Description,* Section 4.1, *Air Quality Analysis,* Section 4.2, *Greenhouse Gas Emissions,* Section 4.3, *Hydrology and Water Quality,* Section 4.4, *Noise,* Section 4.5, *Transportation,* Section 4.6, *Utilities and Service Systems,* Section 4.7, *Effects Found Less Than Significant, Section 5, Other CEQA Required Discussion,* and Section 6, *Alternatives*

Commenter	Comment/Request	How and Where It Was Addressed
	▪ Authority and accessibility of information to prepare an EIR ▪ Impacts related to the SWRCB orders	
Requests to be added to the Project notification distribution list	▪ Kevin Kamnikar, Division Chief/Fire Marshall, Monterey County Regional Fire ▪ George Soneff and Lauren Fried, Manatt, Phelps & Phillips, LLP ▪ Don Wilcox, PE, Senior Engineer, Marina Coast Water District ▪ Colleen Courtney, Field Representative, Office of Senator William W. Monning ▪ Erika Marx, Environmental Protection Specialist/Water Program Manager Directorate of Public Works, Environmental Division U.S. Army Garrison, Presidio of Monterey ▪ Mike Weaver	Added to distribution list

1.4 Scope and Content

The scope and content of the EIR is guided by the requirements set forth in the *State CEQA Guidelines* and input gathered during the NOP and scoping process. Sections 4.1 through 4.7 address the resource areas outlined in the bullet points below. Section 5, *Other CEQA Required Discussions*, covers topics including growth-inducing effects, irreversible environmental effects, and significant and unavoidable impacts. Environmental topic areas that are addressed in this EIR include:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

This EIR addresses the environmental topic areas referenced above and identifies potentially significant environmental impacts, including project-specific and cumulative effects, of the project in accordance with the provisions set forth in the *State CEQA Guidelines*. In addition, the EIR, where required, identifies existing environmental regulations that, when taken into consideration, ensure that the proposed project's environmental effects are less than significant.

Section 6, *Alternatives*, of this EIR was prepared in accordance with Section 15126.6 of the *State CEQA Guidelines* and focuses on a reasonable range of alternatives that are capable of eliminating or reducing significant adverse effects associated with the proposed project while feasibly attaining most of the basic project objectives. The alternatives discussion evaluates the CEQA required "no

project" alternative and three alternative scenarios for operation of the project. It also identifies the "environmentally superior" alternative among the alternatives assessed.

Section 7, *References*, of this EIR includes full citations for all in-text citations within this EIR. Subheadings within this section indicate which section of the EIR the references were cited within. In some cases, multiple references from the same source and same year are cited within a single section, and these citations are differentiated by adding letters to the year in the order of appearance within that section (e.g. District 2019a, District 2019b). Please note that some sources may be repeated within multiple sections of the EIR, but are cited with different lettering in these sections based on the order of appearance within each individual section.

The level of detail contained throughout this EIR is intended to be fully consistent with the requirements of CEQA and applicable court decisions. The *State CEQA Guidelines* provide the standard of adequacy on which this document is based. The *State CEQA Guidelines* Section 15151 states:

> "An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good faith effort at full disclosure."

1.5 Type of EIR

This EIR has been prepared as a Project EIR pursuant to Section 15161 of the *State CEQA Guidelines*. A Project EIR is appropriate for a specific development project. As stated in the *State CEQA Guidelines* Section 15161:

> "This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project, including planning, construction, and operation."

While the proposed project is not what would normally be defined as a traditional "development" project, it is also not part of a larger plan or program where a programmatic EIR would be appropriate. Because the project would result in a specific action (i.e. acquisition of the MWS and approval to submit an application for annexation[2]) by the District Board of Directors, it has been determined that a project-level review is appropriate. The whole of the District action is being considered in this EIR. Refer also to Section 1.2, *Purpose and Legal Authority.* As noted therein, no statement in this EIR is intended or should be construed to constitute an acknowledgment by the District the CEQA process is legally required.

1.6 Lead, Responsible, and Trustee Agencies

The District is considered the Lead Agency in preparing this EIR because the District Board of Directors would need to make a discretionary approval in order to implement the proposed project.

[2] See Section 2.7.2, *Discretionary Approvals and Other Permits,* for more information pertaining to LAFCO approvals.

Section 15367 of the *State CEQA Guidelines* defines a "lead agency" as:

> "…the public agency which has the principal responsibility for carrying out or approving a project. The Lead Agency will decide whether an EIR or negative declaration will be required for the project and will cause the document to be prepared."

SWRCB, LAFCO of Monterey County, CPUC, Regional Water Quality Control Board (RWQCB), and Monterey County Department of Public Health may act as responsible agencies for the proposed project under CEQA. The change of ownership of the MWS would need to be approved by the SWRCB under California Health and Safety Code Section 116525, which requires a new purveyor to apply for and obtain a public water system permit prior to a change in ownership. The permit review process requires the applicant to demonstrate to the SWRCB that it possesses adequate technical, managerial, and financial capability to assure the delivery of pure, wholesome, and potable drinking water. Therefore, the District would need to apply for and obtain a public water system permit from the SWRCB, and the SWRCB would be considered a responsible agency for the proposed project.

LAFCO of Monterey County, acting as a CEQA responsible agency, is anticipated to use the EIR in considering annexation of lands into District's jurisdictional boundary pursuant to Government Code section 56000 et seq. Further, per Government Code Sections 56824.10-56824.14, the District also needs to obtain LAFCO approval to exercise its "latent power" to provide retail water service to customers in the entire MWS, which involves submitting and obtaining LAFCO approval for a plan of services, etc.[3] In addition, the Monterey County Department of Environmental Health may review and/or issue permits to the District for the District's operation of a drinking water system.

If the MWS is acquired through a negotiated purchase, the District would also need to obtain approval from the CPUC for transfer of ownership and operation, thereby making the CPUC a responsible agency. Additionally, the District may need approval from the Regional Water Quality Control Board as part of permit issuance in compliance with the Statewide General National Pollutant Discharge Elimination System Permit for Discharges from Drinking Water Systems, making this agency a responsible agency as well.

Section 15381 of the *State CEQA Guidelines* defines a "responsible agency" as:

> "…a public agency which proposed to carry out or approve a project, for which a Lead Agency is preparing or has prepared an EIR or Negative Declaration. For the purposes of CEQA, the term "Responsible Agency" includes all public agencies other than the Lead Agency which have discretionary approval power over the project."

Trustee agencies have jurisdiction over certain resources held in trust for the people of California but do not have a legal authority over approving or carrying out the project. Section 15386 of the *State CEQA Guidelines* designates four agencies as trustee agencies: the California Department of Fish and Wildlife with regards to fish and wildlife, native plants designated as rare or endangered, game refuges, and ecological reserves; the State Lands Commission, with regard to state-owned "sovereign" lands, such as the beds of navigable waters and state school lands; the California Department of Parks and Recreation, with regard to units of the state park system; and, the University of California, with regard to sites within the Natural Land and Water Reserves System. No trustee agencies have been identified for the proposed project.

[3] This assumes that the District's provision of retail water service to seven golf courses and a private high school, which has been occurring since 1994, is not sufficient to avoid the "latent power" provisions of the Knox-Cortese Act, which is a conservative, but likely, a correct assumption.

1.7 Environmental Review Process

The major steps in the environmental review process, as required under CEQA (assuming CEQA compliance is required at all; see Section 1.2 above), are outlined below. The steps are presented in sequential order. Figure 1-1 illustrates the review process.

1. **Notice of Preparation.** After deciding that an EIR is required, the lead agency must file a NOP soliciting input on the EIR scope from the State Clearinghouse, other concerned agencies, and parties previously requesting notice in writing *(State CEQA Guidelines* Section 15082; Public Resources Code [PRC] Section 21092). The NOP must be posted in the County Clerk's office for not less than 30 days.[4] The NOP may be accompanied by an Initial Study that identifies the issues for which the proposed project could create significant environmental impacts.
2. **Draft Environmental Impact Report (DEIR) Prepared.** The DEIR must contain: a) table of contents or index; b) summary; c) project description; d) environmental setting; e) discussion of significant impacts (direct, indirect, cumulative, growth-inducing and unavoidable impacts); f) a discussion of alternatives; g) mitigation measures; and, h) discussion of irreversible changes.
3. **Notice of Completion.** A lead agency must file a Notice of Completion with the State Clearinghouse when it completes a Draft EIR and prepares a Public Notice of Availability of a Draft EIR. The lead agency must place the Notice in the County Clerk's office for 30 days (PRC Section 21092) and send a copy of the Notice to anyone requesting it *(State CEQA Guidelines* Section 15087).[5] Additionally, public notice of DEIR availability must be given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off the project site; and c) direct mailing to owners and occupants of contiguous properties. The lead agency must solicit input from other agencies and the public and respond in writing to all comments received (PRC Section 21153). The minimum public review period for a DEIR is 30 days. When a Draft EIR is sent to the State Clearinghouse for review, the public review period must be at least 45 days (PRC Section 21091).
4. **Final EIR.** A Final EIR (FEIR) must include a) the Draft EIR; b) copies of comments received during public review; c) list of persons and entities commenting; and, d) responses to comments.
5. **Certification of FEIR.** Prior to making a decision on a proposed project, the lead agency must certify that: a) the FEIR has been completed in compliance with CEQA; b) the FEIR was presented to the decision-making body of the lead agency; and, c) the decision-making body reviewed and considered the information in the FEIR prior to approving a project (*State CEQA Guidelines* Section 15090).
6. **Lead Agency Project Decision.** A lead agency may: a) disapprove a project because of its significant environmental effects; b) require changes to a project to reduce or avoid significant environmental effects; or, c) approve a project despite its significant environmental effects, if

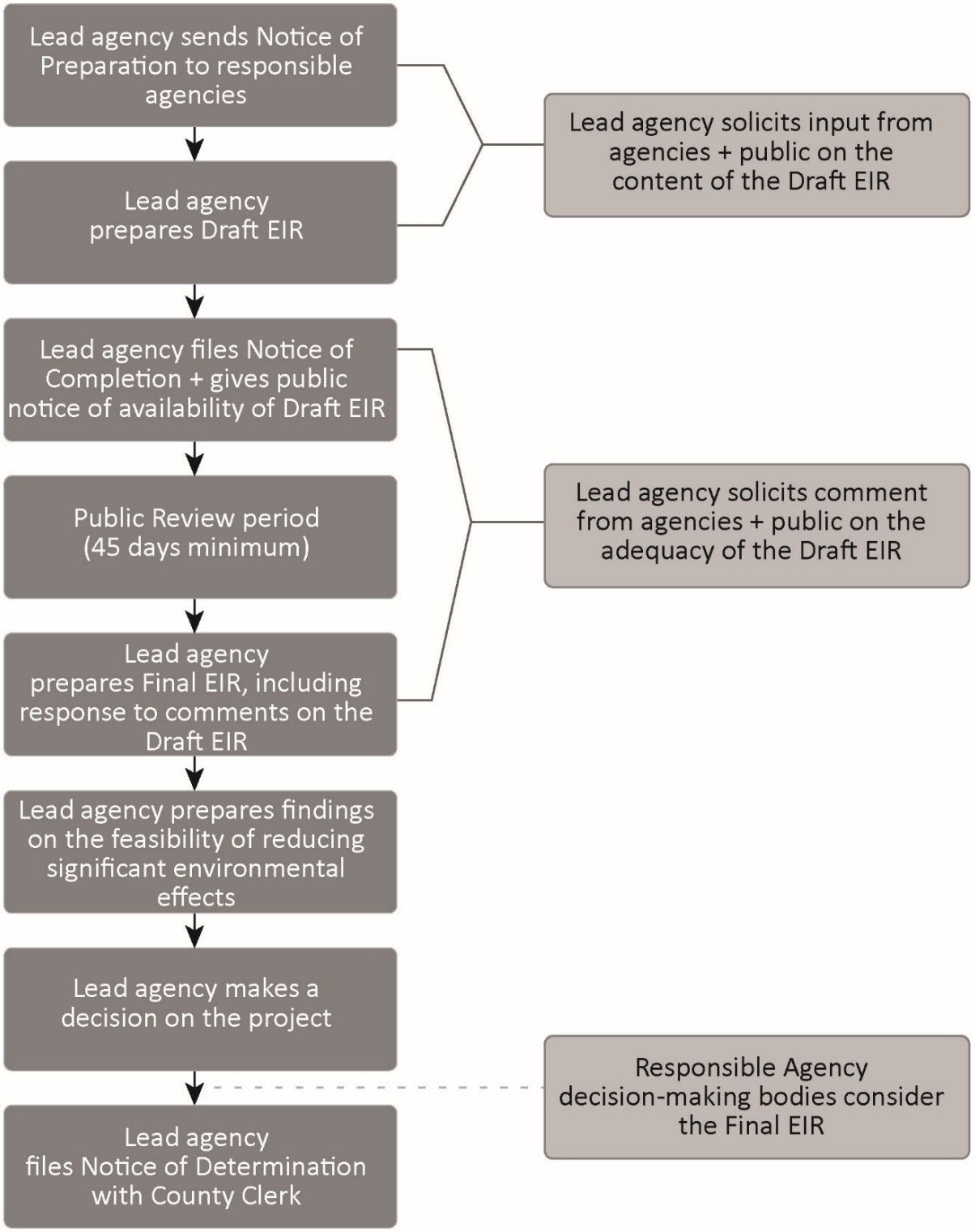
[4] The NOP for this EIR was posted at the Monterey County Clerk office on April 6, 2020, as well as posted to the District website and distributed to interested individuals. The NOP was posted to the Monterey County Clerk office before the Governor of California issued Executive Order N-54-20 on April 23, 2020, which suspends some CEQA noticing requirements for 60 days. Specifically, pursuant to Item 8 of the Executive Order during this period, Lead Agencies need not file CEQA notices with the County Clerk; rather, the Lead Agency must: (1) post the notice on the agency's public-facing website for the same period of time otherwise required; (2) submit all materials electronically to the State Clearinghouse via the CEQAnet Web Portal; and (3) engage in outreach to any individuals and entities known by the lead agency, responsible agency, or project applicant to be parties interested in the project.

[5] Pursuant Executive Order N-54-20, if the Draft EIR is released during the 60-day period outlined above, the Notice of Completion would not be required to be filed with the County Clerk rather the District must: (1) post the notice on the District's public-facing website for the same period of time otherwise required; (2) submit all materials electronically to the State Clearinghouse via the CEQAnet Web Portal; and (3) engage in outreach to any individuals and entities known by the lead agency, responsible agency, or project applicant to be parties interested in the project.

the proper findings and statement of overriding considerations are adopted (*State CEQA Guidelines* Sections 15042 and 15043).

7. **Findings/Statement of Overriding Considerations.** For each significant impact of the project identified in the EIR, the lead or responsible agency must find, based on substantial evidence, that either: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or, c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible (*State CEQA Guidelines* Section 15091). If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that sets forth the specific social, economic, or other reasons supporting the agency's decision.
8. **Mitigation Monitoring Reporting Program.** When an agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects (*State CEQA Guidelines* Section 15097).
9. **Notice of Determination (NOD).** The lead agency then files a Notice of Determination after deciding to approve a project for which an EIR is prepared *(State CEQA Guidelines* Section 15094). The NOD is filed with the County Clerk and must be posted for 30 days and sent to anyone previously requesting notice. Posting of the Notice starts a 30 day statute of limitations on CEQA legal challenges [PRC Section 21167(c)].

Figure 1-1 Environmental Review Process



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2 Project Description

2.1 Project Proponent/Lead Agency

Monterey Peninsula Water Management District
5 Harris Court, Building G
Monterey, California 93940

2.2 Project Location

The project area is within Monterey County and includes the Monterey Water System (MWS)[1], currently served by the California American Water Company (CalAm) (Figure 2-1). This area is approximately 55 square-miles and includes approximately 40,000 customer connections. The project area is located within the Monterey Peninsula region and is bordered by California State University - Monterey Bay and the former Fort Ord to the north, unincorporated Monterey County to the east, the Big Sur coast and the Santa Lucia Mountains to the south, and the Pacific Ocean to the west.

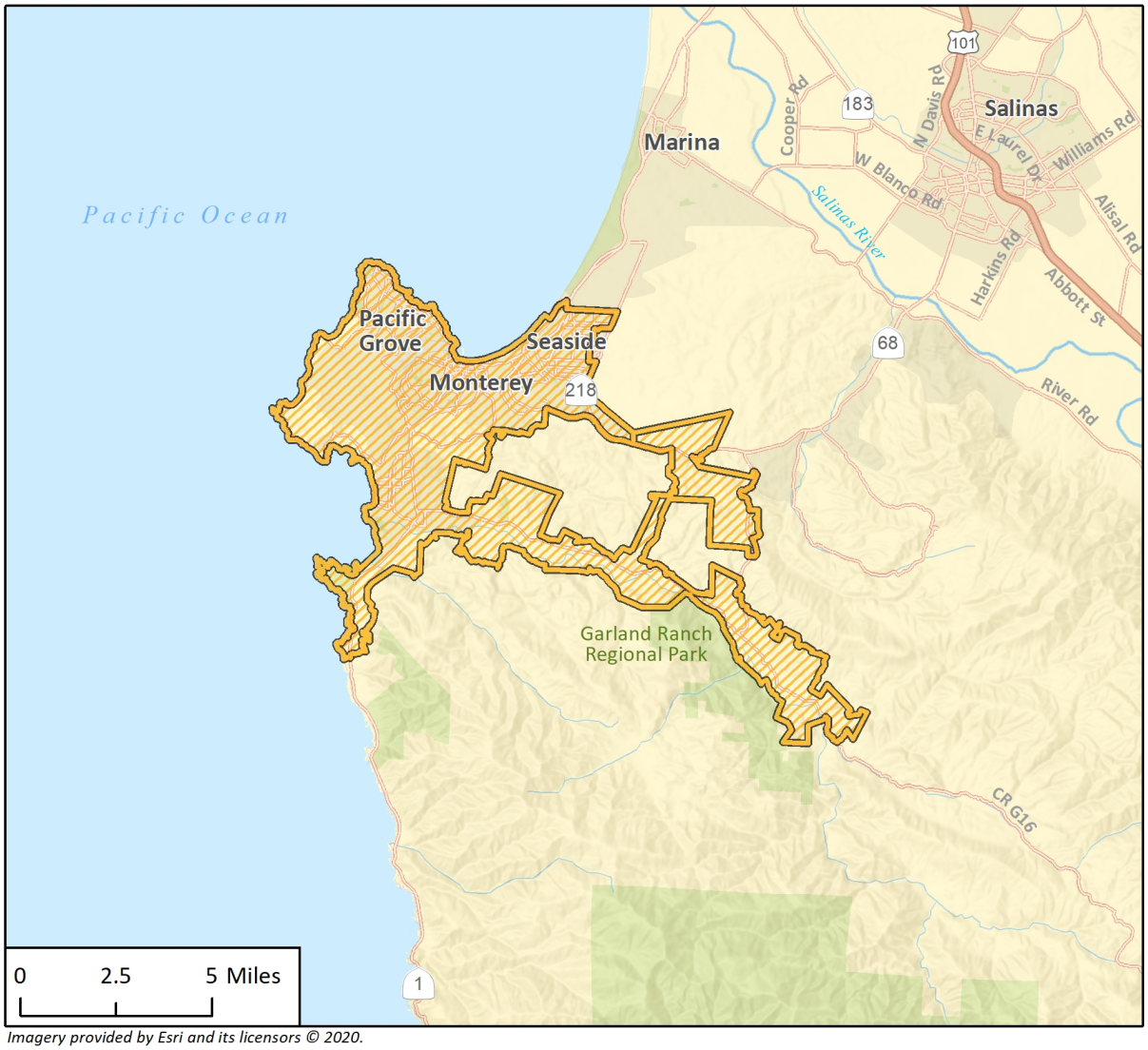
CalAm's water supply systems in Monterey County are comprised of the MWS and several other small stand-alone systems scattered throughout Monterey County—Ralph Lane, Ambler Park, Toro, Chualar, and Garrapata (collectively, the "Central Satellites" or "Satellite Systems"). CalAm also owns and operates several small scattered wastewater systems in various locations of the County.. The proposed project only includes the MWS, a majority of which is located within the District boundaries. The MWS consists of four components serving the following locations (Figure 2-2):

- The "Monterey Main" (Main) component of the MWS serves approximately 38,325 customers within the incorporated 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 and Pebble Beach; and
- Three satellite components of the MWS including Bishop, serving approximately 385 customers; Hidden Hills, serving approximately 454 customers; and Ryan Ranch, serving approximately 212 customers (District 2019).

Although most of the project area is within the District boundaries, the project would also include connections outside of the District's current service area. Approximately 33 residential connections within Monterey Main are currently located just outside the District's boundaries in the Yankee Point area, which is located south of Carmel-by-the-Sea and north of Big Sur in the Carmel Highlands area. In addition, there are approximately 10 residential connections at Hidden Hills, which is located directly east of the District's boundary along Laureles Grade, between Highway 68 and Carmel Valley (Figure 2-3).[2]

[1] The MWS was previously referred to as the Monterey County District water system or the MCD water system in the NOP.
[2] The proposed project also includes acquisition of planned facilities associated with the Monterey Peninsula Water Supply Project, including the 6.4 MGD Desalination Plant. The location of the MPWSP Desalination Plant is further described in Section 2.4.2, *Water Supply Facilities and Infrastructure, Planned Facilities*.

Figure 2-1 Project Location



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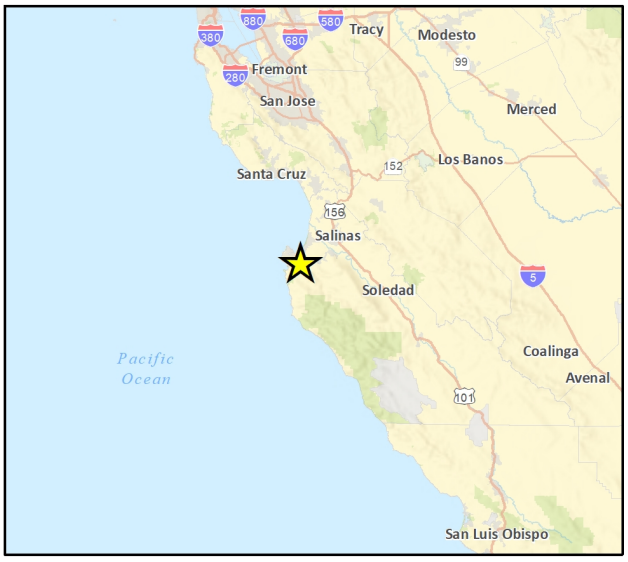

Figure 2-2 District and Project Boundaries

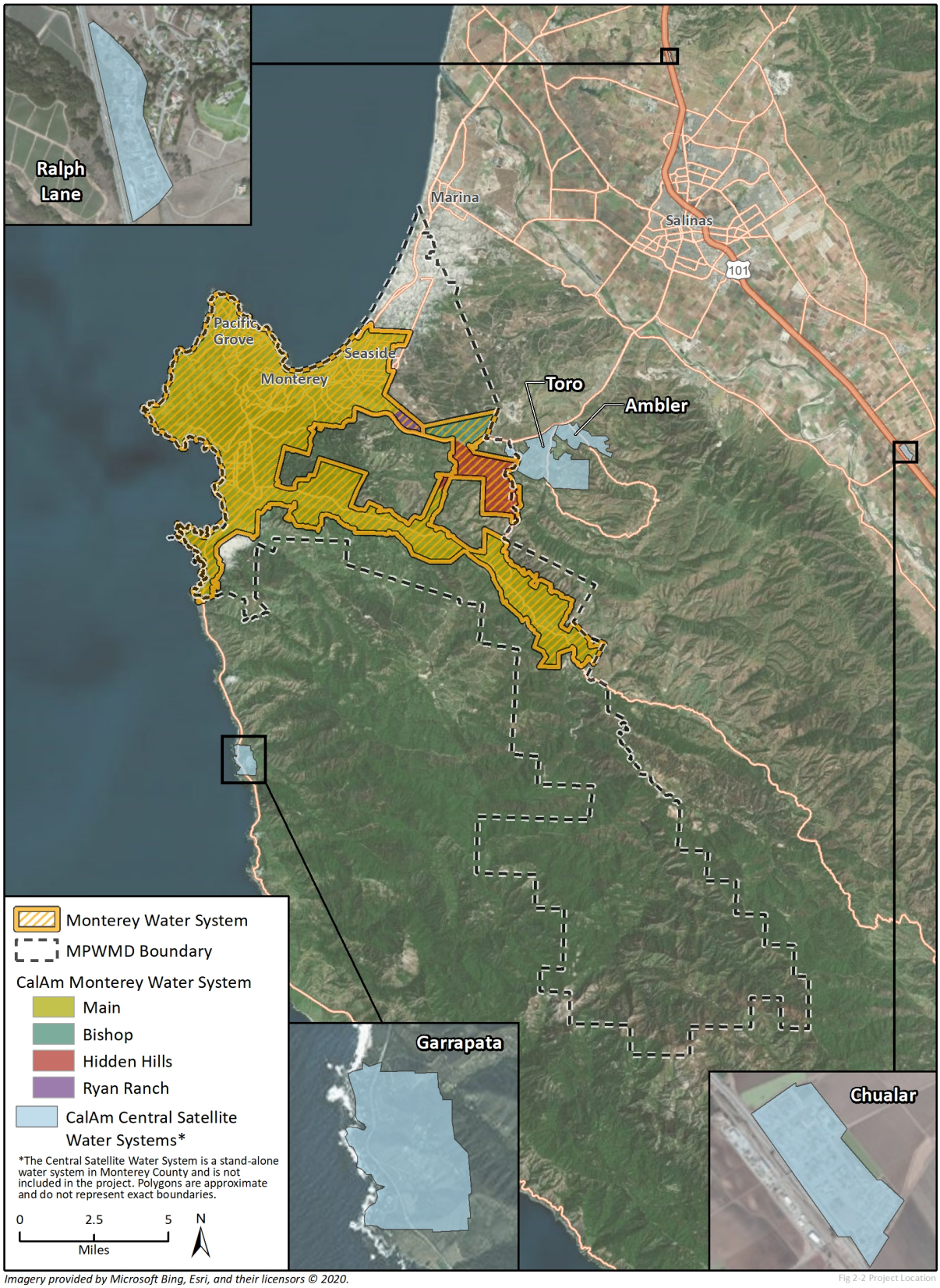

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Fig 2-2 Project Location

Figure 2-3 Areas Proposed to be Annexed into the District Service Area

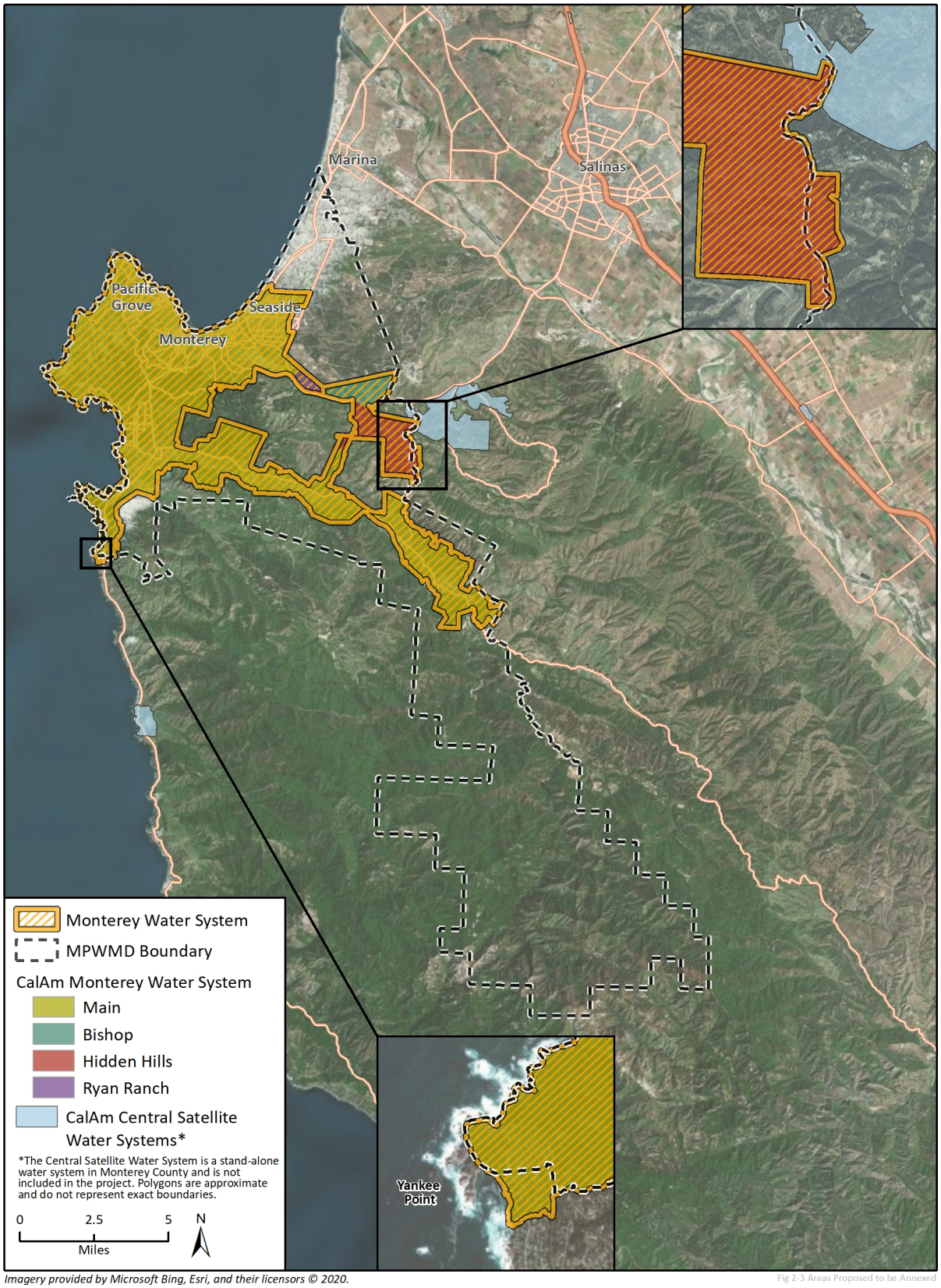

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Fig 2-3 Areas Proposed to be Annexed

2.3 Regulatory Setting

2.3.1 Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) is the main federal law that ensures the quality of Americans' drinking water. Under SDWA, the United States Environmental Protection Agency (U.S. EPA) sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards.

SDWA was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources: rivers, lakes, reservoirs, springs, and groundwater wells. SDWA does not regulate private wells that serve fewer than 25 individuals.

SDWA authorizes the U.S. EPA to set national health-based standards for drinking water to protect against both naturally-occurring and man-made contaminants that may be found in drinking water. These National Primary Drinking Water Regulations set enforceable maximum contaminant levels for particular contaminants in drinking water or require ways to treat water to remove contaminants. Each standard also includes requirements for water systems to test for contaminants in the water to make sure standards are achieved. In addition to setting these standards, the U.S. EPA provides guidance, assistance, and public information about drinking water, collects drinking water data, and oversees state drinking water programs. The MWS is subject to the National Primary Drinking Water Regulations as they relate to the MWS's provision of potable water to its customers.

2.3.2 Urban Water Management Planning Act

Pursuant to the Urban Water Management Planning Act (California Water Code §§ 10610 - 10656) urban water suppliers having more than 3,000 service connections or water use of more than 3,000 acre-feet per year (AFY) for retail or wholesale uses are required to submit an Urban Water Management Plan (UWMP) every five years to the California Department of Water Resources (DWR). The Water Conservation Act of 2009 (often referred to as SBX7-7) requires increased emphasis on water demand management and requires the state to achieve a 20 percent reduction in urban per capita water use by December 31, 2020. Retail urban water suppliers are required to report baseline and compliance data in their UWMPs in accordance with the requirements of SBX7-7. In addition, in 2018 AB 1668 and SB 606, new water conservation legislation, was passed that laid out a new long-term water conservation framework for California. Primarily through amending the Urban Water Management Planning Act this legislation applies to action of the DWR, State Water Resources Control Board (SWRCB), and water suppliers (such as the District). It provides a road map to meet water conservation goals and new and expanded authorities and requirements to strengthen local drought resilience for water suppliers. UWMPs are prepared by California's urban water suppliers to support their long-term resource planning and to ensure that reliable and adequate water supplies are available to meet existing and future water demands over a 20-year planning horizon during normal, single-dry, and multiple-dry year periods.

UWMPs typically must be submitted to DWR by December 31 of years ending in 0 and 5. CalAm's most recent UWMP was completed June 30, 2016 (CalAm 2016).

2.3.3 State Water Resources Control Board

The SWRCB Division of Drinking Water regulates public drinking water systems in the project area through its Northern California Field Operations Branch (FOB), which is responsible for enforcement of the federal and California SDWAs and the regulatory oversight of public water systems to assure the delivery of safe drinking water in this area. FOB staff perform field inspections, issue operating permits, review plans and specifications for new facilities, take enforcement actions for non-compliance with laws and regulations, review water quality monitoring results, and support and promote water system security. In addition, FOB staff are involved in conducting source water assessments, evaluating projects utilizing recycled treated wastewater, and promoting and assisting public water systems in drought preparation and water conservation. SWRCB is also responsible for reviewing and approving applications for changes in ownership of public water systems, as documented in California Health and Safety Code Section 116525. Applicants are required to demonstrate that they possess adequate technical, managerial, and financial capability to assure the delivery of pure, wholesome, and potable drinking water as part of the application process.

2.3.4 California Public Utilities Commission

The California Public Utilities Commission (CPUC) is the agency that regulates privately owned utilities in California, including electricity, telecommunications, natural gas, and water companies. The CPUC sets standards for water service to protect the public health and safety of customers. Investment by the utilities must be preapproved by the CPUC to assure that facilities are necessary and "used and useful" in terms of meeting CPUC standards of water service. Water rates are set by the CPUC to reflect the "cost-of-service." In determining the cost-of-service, the CPUC looks at actual water costs, operations and maintenance costs, depreciation, taxes and fees, and a regulated return on capital based on the net value of assets employed, or rate base (original cost less cumulative depreciation of capital investments).

In December of 2005, the CPUC adopted a Water Action Plan setting forth its policy objectives for the regulation of investor-owned water utilities and highlighting the actions that the CPUC anticipated or would consider taking in order to implement these objectives. The CPUC subsequently adopted a 2010 Water Action Plan to continue on the path set in 2005 to apply regulatory best practices to the water utility industry and to establish water conservation as a top priority.

The 2010 Water Action Plan outlines the CPUC's goals in water regulation:

- Safe, high quality water
- Highly reliable water supplies
- Efficient use of water
- Reasonable rates and viable utilities

Based on those objectives, the 2010 Water Action Plan discusses a roadmap of approximately 30 action items for the CPUC, including strengthening the CPUC's relationship with the California Department of Public Health and SWRCB; and developing leak-detection programs.

The CPUC's regulatory oversight will no longer apply to the MWS if it is acquired by the District.

2.3.5 Measure J

In November 2018, Monterey Peninsula voters within the District passed Measure J which added Rule 19.8 to the District's Rules and Regulations instructing the District to undertake a feasibility study on the public take-over of CalAm's MWS. Specifically, Rule 19.8, added to the District's Rules and Regulations, Regulation I, General Provisions, which states:

A. It shall be the policy of the District, if and when feasible, to secure and maintain public ownership of all water production, storage and delivery system assets and infrastructure providing services within its territory.
B. The District shall acquire through negotiation, or through eminent domain if necessary, all assets of California American Water, or any successor in interest to California American Water, for the benefit of the District as a whole.
C. The General Manager shall, within nine (9) months of the effective date of this Rule 19.8, complete and submit to the Board of Directors a written plan as to the means to adopt and implement the policy set forth in paragraph A, above. The plan shall address acquisition, ownership, and management of all water facilities and services within and outside the District, including water purchase agreements as appropriate. The plan may differentiate treatment of non-potable water services.

In January 2019 the District held a series of listening sessions to receive input on the enactment of District Rule 19.8 and in August 2019 the District General Manager released "A Plan to Adopt and Implement a Policy to Secure and Maintain Public Ownership of All Water Production, Storage and Delivery System Assets and Infrastructure Providing Services Within the Monterey Peninsula Water Management District Territory." "A Preliminary Valuation and Cost of Service Analysis Report," (Feasibility Study) was completed by the District on behalf of Raftelis in October 2019, and on November 12, 2019 the Board of Directors held a workshop on the Feasibility Study for the public to provide input.

2.4 California American Water Supply System

CalAm is a wholly-owned subsidiary of the publicly traded company, American Water Works Company, Inc. (American Water). American Water is a privately-owned national public utility founded in 1886 and is headquartered in Camden, New Jersey. American Water, through its subsidiaries, provides water and wastewater services in the United States and Canada. It serves approximately 14 million people with drinking water, wastewater, and other water-related services in 46 states in the United States and Ontario, Canada. It operates approximately 81 surface water treatment plants; 530 groundwater treatment plants; 10 combined treatment plants; 130 wastewater treatment plants; 51,000 miles of transmission, distribution, and collection mains and pipes; 1,000 groundwater wells; 1,400 water and wastewater pumping stations; 1,300 treated water storage facilities; and 80 dams (District 2019).

CalAm provides water and wastewater service to five regions of California including the Central Division, which includes the MWS. The Central Division, which is comprised of the Main, Ryan Ranch, Bishop, and Hidden Hills components and the Central Satellites, serves approximately 41,000 customer connections and a population of approximately 99,794. CalAm is regulated by the CPUC, U.S. EPA and SWRCB. In 1965 CalAm purchased the Monterey Peninsula's water system and water

rights from California Water and Telephone Company and has been operating throughout the Monterey Peninsula for 55 years (CalAm 2016).

2.4.1 Water Supply Sources

Currently, the primary sources of water for the MWS are supplied to customers from wells located along the Carmel River, including pumping of the Carmel Valley Alluvial Aquifer and groundwater from the Seaside Groundwater Basin. Since 2003, CalAm has not pumped any of its supply directly from the Carmel River. Beginning in 2020, approximately one-third of all supplies will be received from the Pure Water Monterey Advanced Water Purification Facility. These supplies are supplemented by Aquifer Storage and Recovery (ASR) and the Sand City Desalination Plant.

Carmel River

The Carmel River is a 38-mile river that flows northwest through the Carmel Valley and drains into the Pacific Ocean at Carmel Bay near the northern end of the Big Sur Coast. The Carmel River drains a watershed of about 255-square-miles that is bounded by the Santa Lucia Mountains to the south and the Sierra del Salinas to the north.

CalAm receives a supply of water from one reservoir on the Carmel River – the Los Padres Reservoir – which was built in 1949 approximately 25 miles upstream of the Pacific Ocean. Prior to the Los Padres Dam and Reservoir construction, in 1921 the San Clemente Dam and Reservoir was built approximately 18 miles upstream from the Pacific Ocean. Historically, these two reservoirs were the main source of water for the Monterey Peninsula. However, in 2015 the San Clemente Dam was removed because of seismic concerns and a determination by the National Marine Fisheries Service and others that removal of dams on the Carmel River would aid in the recovery of the threatened steelhead trout listed under the federal Endangered Species Act.

CalAm is the current owner of the remaining Los Padres Dam and Reservoir, which had an estimated storage capacity of 1,679 acre-feet (AF) in 2017. This is a reduction from the reservoir's original storage capacity of 2,709 AF. This reduction is contributed to by sediment accumulation behind the dam over its lifespan of almost 70 years (District 2019).

In addition, CalAm receives a supply of water from pumping of subsurface flow from the Carmel Valley Alluvial Aquifer. The Carmel Valley Alluvial Aquifer lies along the Carmel River and is overlaid by the Main component of the MWS. The Carmel Valley Alluvial Aquifer historically was, and still is, the main source of supply of water for CalAm's MWS. However, in 1995 SWRCB issued Order No. WR-95-10 finding that CalAm was diverting 10,730 AFY of water without a valid basis of right from the Carmel River and ordered CalAm to reduce its diversions. WR-95-10 entitled CalAm to 3,376 AFY for the MWS from all Carmel River diversions, including diversions from Los Padres Dam and Reservoir as well as subsurface flow pumped from the Carmel Valley Alluvial Aquifer (CalAm 2016). In October 2009, the SWRCB issued a cease and desist order (CDO) for all unauthorized diversions of water from the Carmel River. Finally, in July 2016 the SWRCB adopted Order WR 2016-0016, amending Order WR-2009-0060, and extending the date by which CalAm must terminate all unlawful diversions from the Carmel River from December 31, 2016 to December 31, 2021. The revised CDO set milestones for CalAm to meet in order to reach the 2021 reduced diversion targets.

Seaside Groundwater Basin

In addition to Carmel River supplies, CalAm's other primary source of supply for the MWS is the Seaside Groundwater Basin. This supply is particularly important during the summer months, when flows from the Carmel River are low. The Seaside Groundwater Basin encompasses 24 square miles and is generally bounded by the Pacific Ocean to the west, the Salinas Valley to the north, the Toro Park area to the east, and State Routes 68 and 218 to the south. The Seaside Groundwater Basin also includes several subareas including the Coastal subarea and the Laguna Seca subarea.

Adjudication of the Seaside Groundwater Basin was initiated in 2003, and in 2006, a court order led to the establishment of the Seaside Groundwater Basin Watermaster. The adjudication evaluated water levels in the basin and determined that the basin was in overdraft. As a result, the adjudication established a "Natural Safe Yield" for the Seaside Groundwater Basin of 3,000 AFY and required pumpers of the basin, including CalAm, to reduce pumping every three years until 2021. By 2021, CalAm will be restricted to no more 1,474 AFY of production from the basin.

Pure Water Monterey

Beginning in 2020, Pure Water Monterey will begin delivery of 3,500 AFY to the Main component of the MWS. Pure Water Monterey is an advanced water purification facility in North Marina which recycles water from four sources: wastewater, agricultural irrigation return flows, stormwater, and agricultural produce processing and wash water. The water is then conveyed to the Seaside Groundwater Basin where it is injected into two subsurface aquifers, the Santa Margarita and the Paso Robles. After a 6-month or longer residency or environmental buffer, the water is extracted for delivery to customer service by CalAm.

Aquifer Storage and Recovery (ASR)

In addition, CalAm and the District operate the Seaside Groundwater Basin ASR system. The ASR system uses available storage in the Seaside Groundwater Basin to store excess Carmel River supplies during the wet season and recovers this water during the dry season for use. Phase 1 of the ASR project was completed in 2008 and Phase 2 was completed in 2013. The ASR is estimated to produce an average of 1,300 AFY (CalAm 2016).

Sand City Desalination

CalAm completed construction of the Sand City Water Supply Project in 2009 and started operating and distributing water from the Sand City Desalination Plant in April 2010. The plant is owned by the City of Sand City but operated by CalAm under a lease agreement with the city. The plant pulls brackish water from the Aromas Sand Formation aquifer near Monterey Bay and treats the water via reverse osmosis. The desalination facility was designed to produce 300 AFY, of which CalAm's allocation according to the CDO is 94 AFY to offset unlawful diversions from the river (CalAm 2016). However, due to source water quality issues and discharge permit requirements the plant has averaged 199 AFY in Water Years 2016-2018 and was estimated to produce 140 AFY in Water Year 2019 (District 2020).

2.4.2 Water Supply Facilities and Infrastructure

The MWS includes facilities and infrastructure that allow for the production, distribution, and delivery of potable water supplies within its service area. CalAm also owns property that generally

supports MWS infrastructure (e.g., wells and water storage tanks) and public utility rights-of-way. Existing MWS facilities, infrastructure, and land include, but is not limited to (District 2019):

- Lease of the Sand City Desalination Plant
- Wells for extraction of water from the Carmel River system and Seaside Groundwater Basin with a total pumping capacity of 29.18 million gallons per day (summarized in Table 2-1)[3]
- Six water treatment facilities of various types and sizes (summarized in Table 2-2)
- Water distribution system consisting of approximately 614 miles of pipe, primarily cast iron, steel, cement asbestos, Polyvinyl chloride (commonly referred to as PVC), and ductile iron pipe with diameters of 1-inch to 36-inches in diameter
- Monterey Pipeline and Pump Station, completed in 2018, comprising approximately 6.5 miles of 36-inch pipe that conveys water from an existing pipeline in Seaside (eastern terminus), through Seaside and Monterey to the Eardley pump station in the city of Pacific Grove (western terminus)
- 59 booster pump stations (excluding production wells) in the Main component of the MWS, 15 pump stations in the satellite component of the MWS, and one pump station in Carmel Valley, which is planned for construction in early 2020
- 108 finished water storage facilities within the MWS with a total combined capacity of 613.9 million gallons, which includes an earthen collecting surface water reservoir on the Carmel River
- 3,496 fire hydrants and an estimated 12,000 distribution valves
- 117 assessor parcels with a total area of approximately 4,753 acres[4]

[3] On September 16, 2019 CalAm filed an application with the Monterey County health department to abandon and destroy the Manor No. 2, Scarlett No. 8, Begonia, and Russell No. 2 and No. 4 wells shown in Table 2-1.
[4] Much of the land outlined above was slated to transfer to the federal Bureau of Land Management, but the transfer has stalled. If the transfer occurs before District acquisition, that land would not be acquired.

Table 2-1 CalAm Monterey Water System Well Summaries

Region	Well Name/Number	Well Capacity (gpm)	Well Capacity (MGD)
Upper Carmel Valley	Los Laureles No. 5	250	0.36
	Los Laureles No. 6	450	0.65
	Garzas No. 3	220	0.32
	Garzas No. 4	220	0.32
	Panetta No. 1	250	0.36
	Panetta No. 2	300	0.43
	Robles Del Rio No. 3	580[1]	0.84
	Russell Well No. 2	Inactive	–
	Russell Well No. 4	Inactive	–
Subtotal		2,270	3.27
Lower Carmel Valley	Rancho Canada No. 1	1,150	1.66
	Cypress No. 1	1,500	2.16
	Pearce No. 1	1,500	2.16
	Schulte No. 2	1,250	1.80
	Manor No. 2	125	0.18
	Begonia	1,600	2.30
	Berwick No. 8	985	1.42
	Scarlett No. 8	Inactive	–
Subtotal		8,110	11.68
Seaside	Plumas No. 4	192	0.28
	LaSalle No. 2	Monitoring	–
	Darwin No. 1	Monitoring	–
	Luzern No. 2	640	0.92
	Ord Grove No. 2	1,000	1.44
	Paralta No. 1	1,350	1.94
	Military No. 1	Inactive	–
	Playa No. 3	350	0.50
	Santa Margarita No. 1	1,700	2.45
	Santa Margarita No. 2[2]	1,700	2.45
	Seaside Middle School No. 3	1,250	1.80
	Seaside Middle School No. 4	1,700	2.45
Subtotal		9,882	14.23
Ryan Ranch	Ryan Ranch No. 7	70[3]	0.10
Bishop	Bishop Well No. 1	410	0.59
Hidden Hills	Bay Ridge Well	361	0.52
	Standex Well	Inactive	–

1Was inactive in 2018

2 ASR well couplets; only one well operated in production at a time; Santa Margarita site owned by the District

3 For single well satellite systems, redundancy is achieved through emergency interties

gpm = gallons per minute; MGD = million gallons per day

Source: District 2019

Table 2-2 Summary of Water Treatment Facilities

Facility Name	Type	Age	Capacity (MGD)
Begonia Iron Removal Plant	Iron and manganese filtration	Originally built in 1975, upgraded in 2001	16.9
Ord Grove Treatment Plant	Chemical disinfection	N/A	N/A
Luzern GAC Filtration System	Granular activated carbon filtration, hydrogen sulfide removal	N/A	
Ryan Ranch Water Treatment Plant	Greensand pressure filtration plant for iron, manganese and arsenic removal	Originally built in 1981 with upgrades made in 2007	0.22
Bishop Water Treatment Plant	Chemical disinfection	N/A	N/A
Hidden Hills Water Treatment Plant	Chemical disinfection	Built in 2001	N/A

MGD = million gallons per day; N/A = not applicable

Source: District 2019

Planned Facilities

CalAm has proposed the Monterey Peninsula Water Supply Project (MPWSP), which includes construction and operation of a 6.4 million gallons per day (MGD) Desalination Plant with sub-surface intake wells and related infrastructure improvements to convey source water to the Desalination Plant, deliver product water, and dispose of brine. The MPWSP is proposed to augment pumping from the Carmel River and Seaside Groundwater Basin and provide a replacement water supply. The proposed Desalination Plant would provide a replacement supply of 6.4 MGD or 6,252 AFY. The MPWSP Desalination Plant is proposed to be located on a CalAm-owned parcel off Charles Benson Road in unincorporated Monterey County, north of the city of Marina and adjacent to the Monterey Peninsula Landfill and Materials Recovery Facility. The MPWSP Desalination Plant was originally anticipated to be commissioned in 2021, in order to meet the SWRCB order to reduce pumping of the Carmel River (refer to Section 2.4.1, *Water Supply Sources, Carmel River*). [5] However, due to delays in obtaining permits, it is unlikely to be online until 2022 or later. Other portions such as pipelines and pump stations have already been built or are under construction (CPUC & Monterey Bay National Marine Sanctuary 2018).

2.4.3 Water Supply Quality

The drinking water quality of the MWS must comply with the SDWA and its primary and secondary drinking water standards. A source water assessment for the MWS was completed in February 2003 and found that possible contaminating activities to which the MWS is most vulnerable include the following sources: airport maintenance and fueling areas, automobile gas stations, dry cleaners, high-density housing, military installations, National Pollutant Discharge Elimination System/Waste

[5] Environmental impacts from construction of the MPWSP Desalination Plant were analyzed under a separate environmental review process, the MWSP Environmental Impact Report/Environmental Impact Statement (EIR/EIS). It is important to note that this EIR does not analyze impacts associated with construction or operation of the 6.4 MGD Desalination Plant, which was already reviewed and approved by the CPUC as part of the MWPSP EIR/EIS. On September 13, 2018, the CPUC certified the combined MWSP EIR/EIS, approved a modified (6.4 MGD Desalination Plant) project, adopted settlement agreements, and issued a Certificate of Public Convenience and Necessity. Although the MWSP EIR is certified, CalAm is still in the process of acquiring all necessary permits. If all the required permits are received and the MWSP is proceeding at the time the potential acquisition is performed, the District intends to acquire the 6.4 MGD Desalination Plant and all pertinent contracts, lands, and easements.

Discharge Requirements (WDR) permitted discharges, parks, storm drain discharge permits, low- and high-density septic systems, and water supply wells (CalAm 2018).

Water quality sampling is performed at various sampling points within the MWS to ensure compliance with regulatory standards. Based on 652 tests on 25,239 water samples for 2,994 constituents, there have been no contaminants detected that exceed any federal or State drinking water standards (CalAm 2018).

2.5 Project Characteristics

The District is proposing to acquire the MWS that currently serves the majority of the incorporated area of the District's service area, as well as two small outlying areas located in a portion of unincorporated Monterey County. Connections outside the District boundaries include approximately 33 residential connections within the Main component of the MWS located at Yankee Point and approximately 10 residential connections in the Hidden Hills component of the MWS. These portions of the Main and Hidden Hills MWS components are physically and functionally connected to the much larger portion of the MWS located within the District's boundary. As a result, if the MWS is acquired by the District it would be less practical to have CalAm continue to be the retail service provider to these connections as it is not practical for these components to operate independently. As a result, the proposed project would also include an annexation of these areas into the District service area. Connections to the MWS located outside the District boundary in Monterey County would be served by the District and no change in service to those connections would occur as a result of the proposed project.[6] However, once annexed, these areas would be subject to District rules and regulations, including those for water use and conservation.

As noted in Section 2.4, the MWS is currently owned and operated by CalAm. As part of the proposed project, the District would purchase all rights and interests in the MWS from CalAm, including planned facilities such as the MPWSP Desalination Plant. As such, the District's proposed acquisition of the MWS would include all associated assets, (i.e., real, intangible, and personal property), including, but not limited to the following:

- Water systems and production wells
- Utility plants
- Vehicles and equipment
- Water rights
- Water supply contracts
- Records, books, and accounts
- Land, easements, and rental property

In addition to the District's acquisition of the MWS, the proposed project includes the District's subsequent operation of the MWS. The District is proposing only to acquire and operate the existing system, and is not proposing changes or expansion to the physical MWS or to the associated water rights, nor is the District proposing any changes to the manner of operation of the MWS or the exercise of the associated water rights. The District would operate and maintain the system from CalAm's existing main office, located at 511 Forest Lodge Road #100 in Pacific Grove, as well as some additional duties from the District's existing administrative building, which is located at 5

[6] No Monterey County infrastructure is included in the proposed project nor would the County be involved in operation and maintenance of the MWS under the proposed project.

Harris Court, Building G in Monterey. Maintenance activities would occur at CalAm's existing operations center and corporate yard located adjacent to the David Avenue Reservoir in Pacific Grove, between Hillcrest Avenue and David Avenue on Carmel Avenue.

MWS Proposed to be Acquired

As described in Section 2.4.2, the MWS is reported to be comprised of the lease of one desalination plant, 33 water wells, six water treatment facilities, 614 miles of pipe, the Monterey Pipeline and Pump Station, 74 pump stations, 108 water storage facilities, and associated fire hydrants and distribution valves, among other assets. In addition, the MWS includes planned facilities associated with the MPWSP including the Carmel Pump Station, the 6.4 MGD Desalination Plant, and associated infrastructure improvements. In addition, there is property that generally supports MWS infrastructure and public utility rights-of-way, including 117 assessor parcels with a total area of approximately 4,753 acres; currently this land is owned by CalAm and is assumed to also be part of the project.

The MWS supplies approximately 9,800 AFY of water to customers within the MWS service area, which includes some customers outside of the District's boundary (Figure 2-2). Connections to the MWS located outside the District boundaries would continue to be served.

The District's acquisition of CalAm's interest in the MWS would include its water rights associated with the MWS, including the currently adjudicated water rights associated with the Seaside Groundwater Basin assigned to CalAm. The proposed acquisition of CalAm's water rights would require the District to meet the same standards in terms of replenishment of water supplies if it were to exceed established limits on withdrawals.

Operation and Maintenance

For the purpose of the technical analyses in this EIR, it is proposed that operation and maintenance activities would be managed from the same locations which they are currently performed, specifically from CalAm's main office at 511 Forest Lodge Road #100 in Pacific Grove, and CalAm's operation center and corporate yard in Pacific Grove at the David Avenue Reservoir, with some additional administrative duties performed at the District's administrative building located at 5 Harris Court, Building G in Monterey, CA. Additionally, it is assumed that the District would offer employment to approximately 77 of the 81 existing staff CalAm staff associated with the MWS and would add approximately 10 additional positions in District administration related to billing, finance, and customer service.[7] In total, there would be approximately 87 employees hired by the District associated with the MWS, which would be a net increase of approximately six employees as compared to existing conditions (87 District employees – 81 existing CalAm employees). In addition, it is assumed that CalAm would hire approximately six additional employees to operate and maintain the Central Satellites (e.g., one meter reader/utility worker, two operators, and three field crew).[8] As a result, is it assumed the project would result in a net increase of approximately 12 employees (approximately 6 District employees + approximately 6 CalAm employees).

[7] It is possible that some of the 77 existing CalAm employees who are offered employment by the District would instead pursue employment opportunities at CalAm or another employer or retire. In these events, the District would hire other employees to fill the open positions. Given the nature of these employment opportunities, it is likely that non-CalAm employees that would be hired by the District currently live in the Monterey Peninsula area.

[8] Although this scenario is possible, it is also possible that CalAm would utilize existing employees to operate and maintain the Central Satellites rather than hiring additional employees.

Fleet maintenance functions, including service and repair of primary system equipment, would be performed out of the existing CalAm operation center and corporate yard located at the David Avenue Reservoir in Pacific Grove, as well as other operations including minor equipment/tool repair and storage of the truck fleet, building materials, traffic control materials, plumbing equipment and tools, and other supplies. Customer service, billing, engineering and human resources functions would be performed from both the existing CalAm main office and the District's administrative office. The existing parking lots at all these facilities are sufficient to continue providing parking to all employee, guests, vendors, and consultants that may have business at the location. Given that these facilities have sufficient existing space and facilities to support operation and maintenance staff and activities, the proposed project would not involve construction of new facilities. In addition, regular business hours for operation and maintenance would continue as under existing operations.

Further, it is proposed that MWS infrastructure, including supply pipelines and storage tanks, would remain at existing locations within the existing MWS service area. Also, the District would operate the MWS and exercise the associated water rights in the same manner as CalAm has done. Other potential operational scenarios for the system are considered in Section 6, *Alternatives*, of this document as required under CEQA.

2.6 Project Objectives

The underlying purpose of the proposed project is for the District to acquire, operate, and maintain the MWS. The objectives of the proposed project are to implement the Purpose approved by the electorate in Measure J:

> "To ensure the long-term sustainability, adequacy, reliability, cost-effectiveness and quality of water service within the Monterey Peninsula Water Management District area, to lower the cost of service to ratepayers, to promote and practice sustainable water management measures, and to establish public ownership of water system assets by establishing regulations requiring the District to take affirmative action, to the extent financially feasible, to acquire the water system assets owned and operated by the California American Water Company that currently provide water service to the District and its ratepayers."

The Purpose of Measure J furthered by this proposed project shall include the following aspects:

- Allow the citizens of the Monterey Peninsula to independently own and operate the water production and distribution system serving customers presently served by the CalAm's MWS
- Provide greater transparency and accountability to residents and businesses on the Monterey Peninsula regarding potable water supplies, as well as increased customer service and reliability
- Enhance customer service and responsiveness to affected CalAm customers
- Provide greater local control over the rate setting process and rate increases
- Provide direct access to locally elected policy makers for water operations
- Allow the District to pursue funding and other financing alternatives available to public agencies for future infrastructure needs, including grants and financing options not available to a CPUC-regulated, privately-owned utility
- Ensure better coordination amongst local governmental decisions involving land use, emergency services, policy, the location and need for capital improvements, and overall planning in the water context

2.7 Intended Uses of this EIR

2.7.1 Agencies Expected to Use this EIR

The following agencies are expected to use this EIR in their review or permitting of the project:

- The District in its capacity as the Lead Agency for the project
- SWRCB
- CPUC, as appropriate
- Local Agency Formation Commission (LAFCO) of Monterey County
- Regional Water Quality Control Board
- Monterey County Department of Public Health

2.7.2 Discretionary Approvals and Other Permits

Discretionary actions required by the District include the following approval:

- Approval by the District Board of Directors for acquisition of the MWS from CalAm

In addition, if the MWS is acquired through a negotiated purchase, the District will need to obtain approval from the CPUC for transfer of ownership and operation of the MWS from CalAm to the District. LAFCO of Monterey County, acting as a CEQA responsible agency, is anticipated to use the EIR in considering any proposed sphere of influence amendments, annexations of lands into District's jurisdictional boundary, activations of latent services or powers pursuant to Government Code section 56000 et seq., or other similar requested LAFCO approvals that effectuation of the project may entail.[9] Further, per Government Code Sections 56824.10-56824.14, the District also needs to obtain LAFCO approval to exercise its "latent power" to provide retail water service to customers in the entire MWS, which involves submitting and obtaining LAFCO approval for a plan of services, etc.[10] In addition, the Monterey County Department of Environmental Health may review and/or issue permits to the District for the District's operation of a drinking water system. Finally, the Regional Water Quality Control Board and/or SWRCB would review the District's operation of the drinking water system as part of permit issuance in compliance with the Statewide General National Pollutant Discharge Elimination System Permit for Discharges from Drinking Water Systems.

[9] Section 851 of the District's enabling law states that any changes to the District boundaries shall be approved through LAFCO in compliance with Government Code section 56000 et seq. as stated above.
[10] This assumes that the District's provision of retail water service to seven golf courses and a private high school, which has been occurring since 1994, is not sufficient to avoid the "latent power" provisions of the Knox-Cortese Act, which is a conservative, but likely, a correct assumption.

3 Environmental Setting

This section provides a general overview of the environmental setting for the proposed project. More detailed descriptions of the environmental setting for each environmental issue area can be found in Section 4, *Environmental Impact Analysis*.

3.1 Regional & Project Area Setting

The project area is located in Monterey County and is comprised of the Monterey Water System (MWS), an approximately 55 square-mile area currently served by California American Water (CalAm). The majority of the project area is within the Monterey Peninsula Water Management District (District) service area, with the remainder 2.2 square miles of the project area located outside the District's current service area. Specifically, approximately 33 connections are located directly south of the District's boundary at Yankee Point and approximately 10 connections are located immediately adjacent and to the east of the District boundary at Hidden Hills. The District and project boundaries are shown in Figure 2-3 in Section 2, *Project Description*. The project area is bordered by California State University, Monterey Bay (CSUMB) and the former Fort Ord to the north, unincorporated Monterey County to the east, the Big Sur coast and the Santa Lucia Mountains to the south, and the Pacific Ocean to the west.

The project area includes the cities of Carmel-by-the-Sea, Pacific Grove, Monterey, Del Rey Oaks, Sand City, and Seaside and extends into portions of unincorporated Monterey County, including the Carmel Highlands, as well as the inland areas of Carmel Valley and the Highway 68 corridor including Ryan Ranch and Toro. Along the coast, the landscape is somewhat varied; however, generally topography slopes west toward the Pacific Ocean at the Monterey Bay. Within the inland areas in the northern portion of the project area, including stretches along the Highway 68 corridor and within the Ryan Ranch, Hidden Hills and Bishop areas, the landscape is generally characterized by the rolling hills of the Sierra de Salinas Range. Inland areas in the southern portion of the project area include the Carmel Valley which consists of a relatively flat valley floor drained by the Carmel River. Finally, to the south is the Carmel Highlands, the entry to Big Sur, which consists of rugged coastal cliffs.

The Mediterranean climate of the region and coastal influence produce moderate temperatures year-round. Marine breezes cause winds from the northwest and west, which are strongest and most persistent in the spring and summer months. Further inland, temperatures are more extreme and rainfall is considerably less.

The territory currently served by the MWS is primarily residential in nature but also includes other land uses such as parks and open space as well as commercial, institutional, and industrial facilities. In general, the project area has developed most densely within the coastal cities and along major roadways, including State Route (SR) 1, SR 68, and Carmel Valley Road. SR 1 is a major north-south highway that runs along most of the Pacific coastline, SR 68 runs east-west and connects and serves as a major route between the Monterey Peninsula and Salinas and lastly, Carmel Valley Road runs through the mouth of the valley, generally following the Carmel River. Lands along the coast are the most developed with residential densities in these areas ranging from very low to high densities (1 dwelling unit per 5 acres or more, to 25 dwelling units per acre). Further inland the landscape is

more rural with rural and low density residential mixed within larger swaths of land preserved for agricultural and open space uses.

Additional resource area environmental setting is provided in Sections 4.1 through 4.7 of this Environmental Impact Report (EIR).

3.2 Baseline and Cumulative Development

3.2.1 EIR Baseline

Section 15125 of the *State California Environmental Quality Act (CEQA) Guidelines* states that an EIR "must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation [NOP] is published." Section 15125 states that this approach "normally constitute[s] the baseline physical conditions by which a lead agency determines whether an impact is significant."

This EIR evaluates impacts against existing conditions, which are generally conditions existing at the time of the release of the NOP (April 2020). It was determined that a comparison to current, existing baseline conditions would provide the most relevant information for the public, responsible agencies and decision-makers. However, it is important to note, on March 4, 2020 the Governor proclaimed a State of Emergency in California as a result of the threat of Coronavirus 2019 (COVID-19). On March 17, 2020 the Health Officer of the County of Monterey issued a Shelter In Place Order for the County of Monterey. The threat of COVID-19, as well as the subsequent State and County proclamations and orders, have resulted in temporary changes to the existing economic and physical conditions in California and Monterey County regionally and the Monterey Peninsula locally. Temporary changes to existing environmental conditions have included reduced vehicle traffic and associated noise and pollutant emissions, reduced electricity consumption. In addition, the timing and likelihood of cumulative development and regional buildout assumptions may be affected during or after the threat of COVID-19. The magnitude and duration of the State of Emergency and associated State and County orders, or future orders related to the threat of COVID-19 cannot be ascertained. Accordingly, the effect of COVID-19 on baseline and future environmental conditions effects of COVID-19 is currently speculative. CEQA Guidelines §15064(d)(3) states that:

> "An indirect physical change is to be considered only if that change is a reasonably foreseeable impact which may be caused by the project. A change which is speculative or unlikely to occur is not reasonably foreseeable."

Furthermore, CEQA Guidelines §15154 states that:

> "If, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact."

It would be speculative for the EIR to assume what changes to baseline or cumulative baseline conditions might occur as a result of COVID-19 or the subsequent State and County proclamations and orders. Therefore, this topic is not discussed further in the EIR.

3.2.2 Cumulative Project Setting

In addition to the specific impacts of individual projects, CEQA requires EIRs to consider potential cumulative impacts of the proposed project. CEQA defines "cumulative impacts" as two or more individual impacts that, when considered together, are substantial or will compound other environmental impacts. Cumulative impacts are the combined changes in the environment that result from the incremental impact of development of the proposed project and other nearby projects. For example, transportation impacts of two nearby projects may be less than significant when analyzed separately but could have a significant impact when analyzed together. Cumulative impact analysis allows the EIR to provide a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

CEQA requires cumulative impact analysis in EIRs to consider either a list of planned and pending projects that may contribute to cumulative effects or a forecast of future development potential. This EIR utilizes the list approach. Planned and pending projects in and near the project area are listed in Table 3-1. These projects are considered in the cumulative analyses in Section 4, *Environmental Impact Analysis*.

Table 3-1 Cumulative Projects List

Cumulative Project	Description	Project Status
Monterey County		
Monterey Peninsula Water Supply Project	The project includes construction and operation of a 6.4 million gallons per day (MGD) Desalination Plant with sub-surface intake wells and related infrastructure improvements to convey source water to the Desalination Plant, deliver product water, and dispose of brine. The MPWSP is proposed to augment pumping from the Carmel River and Seaside Groundwater Basin and provide a replacement water supply. The proposed Desalination Plant would provide a replacement supply of 6.4 MGD or 6,252 acre-feet per year (AFY).	Approved, permits pending
Expanded Pure Water Monterey	The project would include an expansion of capacity of the Pure Water Monterey Project,[1] the Advanced Water Purification Facility would be expanded from the current 5 MGD plant to up to 7.6 MGD maximum capacity plant to enable an increase in groundwater replenishment from 4 MGD to 7.6 MGD. The proposed improvements would provide a new supply of 2,250 acre-feet per year (AFY).	EIR not certified, project not approved
Salinas Valley Water Project Phase II	The project would capture and divert surface water from the Salinas River in order to further offset groundwater pumping in the Salinas River Groundwater Basin. The objectives of the project are to: halt the advancement of seawater intrusion, enhance the value of Phase 1 of the project, and effectively utilize the water allocated to Monterey County Water Resources Agency. The project would divert up to 135,000 AFY of water from the Salinas River for municipal, industrial, and/or agricultural uses in the Pressure and East Side subareas. The project includes two capture and diversion facilities located near the city of Soledad and city of Salinas, and associated conveyance and delivery facilities.	Project operation anticipated 2026

[1] See description in Section 2.4.1, *Water Supply Sources*¸ for a description of the Pure Water Monterey project.

Cumulative Project	Description	Project Status
Corral De Tierra Neighborhood Retail Village	Located at the intersection of Highway 68 and Corral de Tierra Road, approximately seven miles southwest of the city of Salinas, in the Toro area of Monterey County. The project includes approximately 100,000 square feet of commercial and office space.	Approved
Carmel Lagoon Ecosystem Protective Barrier and Scenic Road Protective Barrier Systems	The project involves implementing three project components: 1) ecosystem protective barrier; 2) scenic road protection structure; and 3) interim sandbar management plan. The project is a multi-objective, multi-year, multi-organizational effort to improve habitat for threatened and endangered species in the lower Carmel River and Lagoon, improve natural floodplain function, and protect public infrastructure, while maintaining existing level of flood protection to existing developed areas.	Approved
Carmel River Floodplain Restoration and Environmental Enhancement (CR FREE)	The project consists of two interdependent components: floodplain restoration and levee removal as well as construction of a causeway bridge on SR 1.	Approved
River View at Las Palmas Assisted Living Senior Facility	The project involves construction and operation of a senior assisted living facility on a 15.74-acre site.	Pending approval
Harper Canyon (Encina Hills) Subdivision EIR	The project includes subdivision of 344 acres into 17 residential lots ranging in size from 5.13 acres to 23.42 acres on 164 acres with a single 180-acre remainder parcel.	Approved
Ferrini Ranch Subdivision	The project includes subdivision of an approximately 866-acre property into 212 residential lots including 146 market-rate lots, 23 clustered lots for workforce housing units and 43 lots for Inclusionary housing units; one commercial parcel fronting on River Road; and 600 acres of open space.	Approved
East Garrison Specific Plan	The project includes a Specific Plan and mixed-use development of a 244-acre property located in the East Garrison area on the eastern edge of the former Fort Ord. The development would include single- and multi-family residential, commercial, office/professional, institutional, and recreational uses. The East Garrison Specific Plan proposes the construction of up to 1,470 residences, 75,000 square feet (sq ft) of commercial uses, 11,000 sq ft of public and institutional uses, 100,000 sq ft of artist/cultural/educational uses, approximately 50 acres of open space (including 12 acres of improved parks and trails), and associated roadways, landscaping, and utility infrastructure.	Construction began in 2014 with anticipated completion in 2020
Rio Ranch Marketplace	The project consists of commercial development of a 3.8-acre undeveloped infill site. The project would consist of a retail marketplace development and project plans are currently under development. Potential uses may include specialty grocer, retail shops, restaurants, cafes, and other consumer-oriented professional services. The project would require an Administrative Permit and design Approval for development in the “S” (Site Control) and “D” (Design Control) zoning districts.	Environmental review in progress

Cumulative Project	Description	Project Status
Fort Ord Dunes State Park Campground	The project involves construction and operation of a campground facility and associated infrastructure within Fort Ord Dunes State Park, including 45 RV sites and two host sites with electrical and water hookups, 10 hike/bike sites, and 43 tent sites; parking for 40 vehicles; restrooms with showers; a multi-purpose building; an outdoor campfire center; interpretation/viewing areas; renovated bunkers; an entrance station near the 1st Street underpass; modular structures; storage yard and maintenance shop; improved beach access/trails; one plumbed restroom with outdoor shower for beach use; a 200-foot wildlife/habitat corridor; internal campground trail network, trail improvements, and roadway improvements; and off-site utilities.	Approved, not built
Fort Ord Regional Trail and Greenway (FORTAG)	The FORTAG trail alignment includes approximately 27 miles of new paved trail, primarily on the inland side of SR 1 and connects with the existing Monterey Bay Coastal Recreation Trail at several locations on the coastal side of SR 1. The project primarily consists of three loops – a northern, central, and southern loop – that roughly encircle the city of Marina, the CSUMB campus, and the city of Seaside, respectively. On the north side of South Boundary Road, the trail would extend east to Rancho Saucito in Monterey and link to bike facilities in the Ryan Ranch Business Park. The proposed trail alignment also includes several spurs (included in the 27-mile length) that extend from the three loops to connect with existing bicycle/pedestrian infrastructure.	Approved
DeepWater Desal	The project involves construction of a 23 MGD desalination facility in Moss Landing estimated to produce 25,000 AFY of water to serve the Monterey Peninsula, Castroville, Salinas and parts of Santa Cruz County.	Approved, the project still requires many permits and remains speculative; however, project proponents continue to develop agreements and advance towards project approvals.
Interlake Tunnel	The project includes construction of a tunnel to divert water from Nacimiento Reservoir to San Antonio Reservoir that would have otherwise been spilt at Nacimiento Dam.	Approved, pending construction
City of Marina		
The Dunes on Monterey Bay	The project consists of a mixed-use development with 1,237 dwelling units and 7,600 square feet of office space.	Approved, under construction
Marina Station	The project includes a mixed-use development with 1,360 residential dwelling units to include approximately 887 single family lots and 473 multi-family units. Development will include approximately 60,000 square feet of retail space, 144,000 square feet of office space, and 652,000 square feet of business park/industrial uses.	Approved, pending construction
Sea Haven (formerly Marina Heights)	The project consists of development of a community with residences, parks, and trails. Community would consist of three neighborhoods for a total of 1,050 residential units.	Approved, under construction

Cumulative Project	Description	Project Status
Cypress Knolls Senior Residential	The project includes a senior residential community with active-adult housing, care services, senior community center, and supportive amenities and services on 188 acres.	Approved, pending construction
Marina Downtown Vitalization Specific Plan	The project involves a redevelopment plan for Marina's 225-acre downtown area comprising mixed-use commercial, residential, educational, and civic uses. At full buildout, the plan would result in a net increase of 2,440 residential dwelling units, 718,000 square feet of multiple use, 70,000 square feet of office space, and 50,000 square feet of civic facilities, and a net decrease of 161,000 square feet of retail/service uses, 27,000 square feet of visitor-serving uses, and 270,000 square feet of industrial uses.	Undergoing environmental review
Mosaic Student Housing	The project includes demolition of two existing dwellings and construction of multi-family apartment (12 units).	Approved
Filighera Apartment Complex	The project consists of demolition of an existing single-family dwelling and construction of multi-family apartment (10 units).	Approved, pending permits
Veterans Transition Center Housing	The project includes attached multi-family transitional housing (71 units).	Approved
Shores at Marina	The project includes multi-family apartment (58 units).	Approved
Seacrest Apartments	The project consists of multi-family apartment (10 units).	Approved
Joby Aviation Manufacturing Facility Project	The project consists of the construction of a new 580,000 square foot single story steel manufacturing building which would be used for the production of light-weight, all-electric, vertical take-off and landing aircrafts. The building would be located at the Marina Municipal Airport.	Construction initiated, anticipated to be completed mid-2021
City of Del Rey Oaks		
Del Rey Oaks RV Resort	On a 53.6-acre site located north of Ryan Ranch Business Park, this project would develop 71 RV sites and a 7,670 square foot "great lodge" and a 2,025 square foot "operations building" on 17 acres in the first development phase. Total build out is 210 RV sites and 13,595 square feet of structures.	Approved, pending construction
Del Rey Oaks/Former Fort Ord Parcels	The project includes an approximately 340-acre mixed-use development east of General Jim Moore Boulevard along South Boundary Road.	Planning process
South Boundary Road Realignment and Roundabout	The project consists of a proposed realignment of South Boundary Road and installation of a new roundabout at the intersection with General Jim Moore Boulevard. Project would also include installation of a pedestrian and bicycle path on the south side of the realigned South Boundary Road toward Ryan Ranch Business Park.	Planning process

Cumulative Project	Description	Project Status
City of Seaside		
Campus Town Specific Plan	The project includes an approximately 122-acre community with 1,485 housing units, 250 hotel rooms, 75 youth hostel beds, 150,000 square feet of retail, dining, and entertainment, and 50,000 square feet of office, marketspace, and light industrial uses.	Approved
The Projects at Main Gate	The project is a mixed-use development including retail and entertainment. The development site is approximately 60 acres of vacant coastal land at the Main Gate of the former Fort Ord Army Base, adjacent to the CSUMB campus. The mixed-use project will include retail, entertainment, residential and hotel.	Approved, not built
Nurses Barracks	The project includes redevelopment of a site located on the former Fort Ord on Parker Flats Cutoff Road, on a 70.4-acre site, where former Nurses Barracks buildings were previously located, to create 40 apartments.	Application pending
Central Coast Veterans Cemetery	The project includes development of a cemetery to provide 106,476 gravesites with 81,040 columbaria and 25,436 casket burial sites to meet the needs of veterans for the following 100 years.	Phase 1 development complete; Phase 2 approved, pending construction
Seaside East	The project consists of approximately 580 acres of land east of General Jim Moore Boulevard zoned for residential, commercial, and recreational uses.	In the planning process
Gigling Road Widening	Widening Gigling Road to a four-lane arterial between General Jim Moore Boulevard and Eastside Road.	Approved, pending construction
Terrace and Broadway	The project includes development 105 units of mixed use multi family, townhomes and retail on 2.5 acres.	Approved, construction initiated
The Seaside Resort	The hotel project consists of 275 rooms, 175 timeshare units, and 125 custom residential fronting the Bayonet and Black Horse golf courses.	Approved, first stage complete, second stage under construction
Sand City		
The Collection at Monterey Bay	The project includes a 342-room coastal resort on the 26.46-acre site that may be constructed in two phases. Phase I is a 139-room hotel on a 7.9-acre site. Phase II is a coastal resort on a 16.25-acre site consisting of a 203 visitor rooms, a restaurant with banquet facilities, a health/wellness spa, parking, and other ancillary and related improvements, and public parking improvements on a 2.31-acre site.	Approved, pending construction
Catalina Lofts	The project consists of a 18,636 square foot mixed-use project on a 15,000 square foot vacant property with 8 residential units and 7 commercial units.	Approved land entitlement, awaiting issuance of building permit
South of Tioga	The project is a mixed-use development on 10.64-acre site replacing industrial uses with 356 residential units and a 216-room hotel, and a restaurant.	Demolition approved, planning process
Stepanek Mixed-Use Project	The project is an 8,000 square foot, 2-story mixed-use development on a 5,625 square foot parcel replacing existing commercial building with 1 residential unit and 1 commercial unit.	Approved land entitlement, awaiting plan check review

Cumulative Project	Description	Project Status
Dayton Residential Project	The project includes two new single-family homes (one with an accessory unit) on a property previously used as a fenced commercial yard.	Approved, under construction
San Juan Pool's Commercial Project	The project is a 7,000 square foot, 1-story, 2-unit metal frame commercial warehouse on an approximately 10,000 square foot parcel previously used as a commercial storage yard.	Approved, under construction
City of Monterey		
Monterey Motorsports Vehicle Storage	The project consists of an 88-unit commercial condominium vehicle storage facility.	Approved, under construction
FORA Business Park	The project includes a 100-acre business park north and south of South Boundary Road.	Planning process
Middlebury Institute of International Studies Master Plan	The project consists of a 20-year master plan including two five-year phases plus a third long-range phase, include moving most parking areas from the center to the edges of campus and concentrating faculty offices and classrooms around the new, green campus core.	Approved
City of Pacific Grove		
Monterey-Pacific Grove Area of Special Biological Significance (ASBS) Stormwater Management Project	The project includes diverting stormwater from the Greenwood Park and Congress Storm Drain Watersheds to the David Avenue Reservoir site, provide treatment, and deliver recycled water to irrigation sites throughout the city. Facilities include a 15-million-gallon storage reservoir and 8,800 lineal feet of recycled water distribution pipeline. The primary purpose of the project is to improve stormwater quality prior to being discharged into the ASBS, in accordance with State Water Resources Control Board standards. A secondary project purpose is to provide stormwater as a source of non-potable recycled water supply for local irrigation.	Construction ongoing

4 Environmental Impact Analysis

This section discusses the potential environmental effects for the specific issue areas that were identified through the Notice of Preparation and scoping process as having the potential to experience significant effects. A "significant effect" as defined by the *State CEQA Guidelines* Section 15382:

> a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment but may be considered in determining whether the physical change is significant.

The assessment of each issue area begins with a discussion of the environmental setting related to the issue, which is followed by the impact analysis. In the impact analysis, the first subsection identifies the methodologies used and the "significance thresholds," which are those criteria adopted by the District and other agencies, universally recognized, or developed specifically for this analysis to determine whether potential effects are significant. The next subsection describes each impact of the proposed project, mitigation measures for significant impacts, and the level of significance after mitigation. Each effect under consideration for an issue area is separately listed in bold text with the discussion of the effect and its significance. Each bolded impact statement also contains a statement of the significance determination for the environmental impact as follows:

- **Significant and Unavoidable**. An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per Section 15093 of the *State CEQA Guidelines*.
- **Less than Significant with Mitigation Incorporated**. An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under Section 15091 of the *State CEQA Guidelines*.
- **Less than Significant**. An impact that may be adverse but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact.** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Following each environmental impact discussion is a list of mitigation measures (if required) and the residual effects or level of significance remaining after implementation of the measure(s). In cases where the mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed and evaluated as a secondary impact. The impact analysis concludes with a discussion of cumulative effects, which evaluates the impacts associated with the proposed project in conjunction with other planned and pending developments in the area listed in Section 3, *Environmental Setting*.

Section 15065 of the *State CEQA Guidelines* also requires the following specific issues be addressed as part of the environmental review for the project:

- The potential for the project to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory;
- Project impacts that are individually limited, but cumulatively considerable. ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects); and
- Environmental effects of the project which will cause substantial adverse effects on human beings, either directly or indirectly.

Section 4.7, *Effects Found Less Than Significant*, describes the potential effects of the project on plant and animal species populations, habitats, communities, and migratory patterns; describes the project's potential effects on important historical and prehistorical cultural resources; and describes the project's potential effects on tribal cultural resources on the project area. As discussed in this section, the project would not result in significant and unavoidable impacts to biological, cultural, or tribal cultural resources. Potential adverse environmental effects to human beings are discussed in Section 4.2, *Air Quality*, Section 4.3, *Greenhouse Gas Emissions,* Section 4.4, *Noise*, Section 4.7, *Transportation,* and Section 4.7, *Effects Found Less Than Significant*. As discussed above, each environmental analysis section of the EIR concludes with a discussion of the project's contribution to cumulative effects.

Also refer to the Executive Summary of this EIR, which summarizes all impacts and mitigation measures that apply to the project.

4.1 Air Quality

This section evaluates the potential impacts related to regional and local air quality associated with implementation of the proposed project.

4.1.1 Setting

a. Climate and Meteorology

Air quality is affected by the rate and location of pollutant emissions and by climatic conditions that influence the movement and dispersion of pollutants. Atmospheric conditions, such as wind speed, wind direction, and air temperature gradients, along with local and regional topography, influence the relationship between air pollutant emissions and air quality.

The California Air Resources Board (CARB) has established 15 air basins statewide. The project area is located in the North Central Coast Air Basin (NCCAB), which is the geographic scope for this analysis. The NCCAB is comprised of Monterey, Santa Cruz, and San Benito Counties and covers an area of 5,159 square miles. The Diablo Range marks the northeastern boundary and, together with the southern extent of the Santa Cruz Mountains, forms the Santa Clara Valley, which extends into the northeastern tip of the NCCAB. Further south, the Santa Clara Valley transitions into the San Benito Valley, which runs northwest to southeast with the Gabilan Range as its western boundary. To the west of the Gabilan Range is the Salinas Valley, which extends from Salinas at its northwestern end to King City at its southeastern end. The western side of the Salinas Valley is formed by the Sierra de Salinas, which also forms the eastern side of the smaller Carmel Valley. The coastal Santa Lucia Range defines the western side of the Carmel Valley (Monterey Bay Air Resources District [MBARD] 2008).

The semi-permanent high-pressure cell in the eastern Pacific (known as the Pacific High) is the basic controlling factor in the climate of the NCCAB. In the summer, the Pacific High pressure cell is dominant and causes persistent west and northwest winds over the entire California coast. Air descends in the Pacific High pressure cell, forming a stable temperature inversion of hot air over a layer of cool coastal air. The onshore air currents pass over cool ocean waters to bring fog and relatively cool air into the coastal valleys. The warmer air loft acts as a lid to inhibit vertical air movements (MBARD 2008).

The generally northwest to southeast orientation of mountainous ridges tends to restrict and channel the summer onshore air currents. Surface heating in the interior portion of the Salinas and San Benito Valleys creates a weak low pressure system which intensifies the onshore air flow during the afternoon and evening. In the fall, the surface winds become weak, and the marine layer grows shallow, dissipating altogether on some days. The air flow is occasionally reversed in a weak offshore movement, and the relatively stationary air mass is held in place by the Pacific High pressure cell, which allows pollutants to build up over a period of a few days. It is most often during this season that north or east winds develop to transport pollutants from either the San Francisco Bay Area or the Central Valley into the NCCAB (MBARD 2008).

During the winter, the Pacific High pressure cell migrates southward and has less influence on the NCCAB. Air frequently flows in a southeasterly direction out of the Salinas and San Benito Valleys, especially during night and morning hours. Northwest winds are nevertheless still dominant in winter, but easterly flow is more frequent. The general absence of deep, persistent inversions along with occasional storm systems usually results in good air quality for the NCCAB in winter and early

spring (MBARD 2008). The project area is located to the east and south of Monterey Bay, a 25-mile wide inlet that allows marine air at low levels to penetrate the interior.

b. Air Pollutants of Primary Concern

Primary criteria pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere. Primary criteria pollutants include carbon monoxide (CO), nitrogen dioxide (NO_2), fine particulate matter (PM_{10} and $PM_{2.5}$), sulfur dioxide (SO_2), and lead (Pb). Ozone (O_3) is considered a secondary criteria pollutant because it is created by atmospheric chemical and photochemical reactions between volatile organic compounds (VOC)[1] and nitrogen oxides (NO_X). The characteristics, sources, and health and atmospheric effects of criteria air pollutants and toxic air contaminants (TACs) are described below.

Ozone

Ozone is a colorless gas with a pungent odor. Most O_3 in the atmosphere is formed as a result of the interaction of ultraviolet light, VOCs, and NO_X. NO_X is formed during the combustion of fuels, while VOCs are formed during combustion and evaporation of organic solvents. Because O_3 requires sunlight to form, it mostly occurs in substantial concentrations between the months of April and October. Ozone has direct human health effects. Short-term effects include eye irritation, shortness of breath, asthma attacks, and respiratory irritation that can increase risk of respiratory infection and susceptibility to pulmonary inflammation. Long-term exposure can increase the risk of mortality and increase the incidence of asthma and cardiovascular harm (e.g., heart attacks, heart disease, strokes) among populations (United States Environmental Protection Agency [USEPA] 2020a). Groups most sensitive to O_3 include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors. Specifically, children and people who exercise strenuously outdoors are more sensitive to O_3 because they spend more time outdoors and inhale at a more rapid rate than the average adult (California Air Resources Board [CARB] 2020a).

Carbon Monoxide

Carbon monoxide is an odorless, colorless gas that causes a number of health problems including fatigue, headache, confusion, and dizziness. The incomplete combustion of petroleum fuels in on-road vehicles and at power plants is a major source of CO. Therefore, elevated concentrations are usually only found near areas of high traffic volumes. The use of wood stoves and fireplaces can also be a substantial local source of CO emissions. Carbon monoxide tends to dissipate rapidly into the atmosphere; consequently, elevated CO concentrations are generally associated with major roadway intersections during peak-hour traffic conditions. Specifically, localized CO "hotspots" can be created at intersections where traffic levels are sufficiently high such that the local CO concentration exceeds the National Ambient Air Quality Standards (NAAQS) of 35.0 parts per million (ppm) or the California Ambient Air Quality Standards (CAAQS) of 20.0 ppm. The health effects of CO are related to its affinity for hemoglobin in the blood. At high concentrations, CO reduces the

[1] Organic compound precursors of ozone are routinely described by a number of variations of three terms: hydrocarbons (HC), organic gases (OG), and organic compounds (OC). These terms are often modified by adjectives such as total, reactive, or volatile and result in a rather confusing array of acronyms: HC, THC (total hydrocarbons), RHC (reactive hydrocarbons), TOG (total organic gases), ROG (reactive organic gases), TOC (total organic compounds), ROC (reactive organic compounds), and VOC (volatile organic compounds). While most of these differ in some significant way from a chemical perspective, two groups are important from an air quality perspective: non-photochemically reactive in the lower atmosphere and photochemically reactive in the lower atmosphere (HC, RHC, ROG, ROC, and VOC). MBARD uses the term VOC to denote organic precursors.

amount of oxygen in the blood, causing dizziness, confusion, heart difficulties in people with chronic diseases, reduced lung capacity, and unconsciousness (USEPA 2016a).

Nitrogen Dioxide

Nitrogen dioxide is a by-product of fuel combustion, with the primary source being motor vehicles and industrial boilers and furnaces. The principal form of NO_2 is produced by combustion of nitric oxide (NO), but NO reacts rapidly to form NO_2, creating the mixture of NO and NO_2 commonly referred to as NO_X. NO_2 is an acute respiratory irritant and can increase the risk of acute and chronic respiratory diseases, particularly asthma. Long-term exposures to NO_2 can increase the incidence of asthma and susceptibility to respiratory infections. Nitrogen dioxide absorbs blue light and causes a reddish-brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of particulate matter no more than 10 microns in diameter (PM_{10}) and acid rain (USEPA 2016b).

Sulfur Dioxide

SO_2 is a colorless, pungent, irritating gas formed primarily by the combustion of sulfur-containing fossil fuels. When SO_2 oxidizes in the atmosphere, it forms sulfur trioxide. Collectively, these pollutants are referred to as sulfur oxides (SO_X). In humid atmospheres, SO_2 can also form sulfuric acid mist, which can eventually react to produce sulfate particulates that can inhibit visibility. Fuel combustion is the major source of SO_2, while chemical plants, sulfur recovery plants, and metal processing are minor contributors. At sufficiently high concentrations, SO_2 irritates the upper respiratory tract. At lower concentrations, when in conjunction with particulates, SO_2 appears to do greater harm by injuring lung tissues. This compound also constricts the breathing passages, especially in people with asthma and people involved in moderate to heavy exercise. Sulfur dioxide causes respiratory irritation, including wheezing, shortness of breath, and coughing. Long-term SO_2 exposure has been associated with increased risk of mortality from respiratory or cardiovascular disease. Sulfur oxides, in combination with moisture and oxygen, can yellow leaves on plants, dissolve marble, and eat away iron and steel (USEPA 2019a).

Suspended Particulates

Suspended particulates are mostly dust particles, nitrates, and sulfates. They are a by-product of fuel combustion and wind erosion of soil and unpaved roads and are directly emitted into the atmosphere through these processes. Suspended particulates are also created in the atmosphere through chemical reactions. PM_{10} is small particulate matter measuring no more than 10 microns in diameter, while $PM_{2.5}$ is fine particulate matter measuring no more than 2.5 microns in diameter.

PM_{10} consists of particulate matter emitted directly into the air (e.g., fugitive dust, soot, and smoke from mobile and stationary sources, construction operations, fires, and natural windblown dust) as well as particulate matter formed in the atmosphere by condensation and/or transformation of SO_2 and VOCs. $PM_{2.5}$ can also be formed through secondary processes such as airborne reactions with certain pollutant precursors, including VOCs, ammonia, NO_X, and SO_X. Emissions of $PM_{2.5}$ are generally associated with combustion processes as well as formation in the atmosphere as a secondary pollutant through chemical reactions. Traffic generates particulate matter emissions through entrainment of dust and dirt particles that settle onto roadways and parking lots. PM_{10} and $PM_{2.5}$ are also emitted by burning wood in residential wood stoves and fireplaces and open agricultural burning.

Fine particulate matter is more likely to penetrate deep into the lungs and poses a serious health threat to all groups, but particularly to the elderly, children, and those with respiratory problems.

More than half of the small and fine particulate matter that is inhaled into the lungs remains there, which can cause permanent lung damage. These materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance. Acute and chronic health effects associated with high particulate levels include the aggravation of chronic respiratory diseases, heart and lung disease, and coughing, bronchitis and respiratory illnesses in children (USEPA 2018a).

Lead

Lead is a metal found naturally in the environment as well as in manufacturing products. The major sources of airborne Pb emissions historically have been mobile and industrial sources. However, as a result of phasing out leaded gasoline between 1975 and 1995, metal processing currently is the primary source of Pb emissions (USEPA 2013b). The highest level of Pb in the air is generally found near lead smelters. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers. Lead may cause a range of health effects, including anemia, kidney disease, and neuromuscular and neurological dysfunction (in severe cases) (USEPA 2017a). Ambient lead concentrations have been well below federal and state standards for decades and, as discussed in Section 4.1.1(c), *Current Air Quality*, are still below ambient air standards in the project area. Lead air emissions are not discussed in the analysis below due to low ambient levels, low levels from mobile source fuel emissions, and a lack of project-related stationary sources of lead emissions.

Toxic Air Contaminants

Public exposure to TACs is a significant environmental health issue in California. The California Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the primary being particulate matter from diesel-fueled engines. According to CARB, diesel particulate matter emissions are believed to be responsible for about 70 percent of California's estimated known cancer risk attributable to toxic air contaminants and comprise about eight percent of outdoor $PM_{2.5}$ (CARB 2020b).

c. Current Air Quality

As the local air quality management agency, MBARD is required to monitor air pollutant levels to ensure that state and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards. Table 4.1-1 summarizes the representative annual air quality data from the nearest CARB and USEPA monitoring stations between 2017 and 2019 for all criteria pollutants. As shown in Table 4.1-1, no state or federal standards were exceeded at these monitoring stations in the past three years except for the federal $PM_{2.5}$ standard, which was exceeded one day in 2017 and four days in 2018. Three of the four exceedances in 2018 that occurred on November 10, 11, and 17 are likely the result of wildfire smoke from the Camp Fire, which burned over 153,000 acres in Butte County between November 8 and November 25, 2018.

Table 4.1-1 Ambient Air Quality Data (2017 – 2019)

Pollutant	Standard	2017	2018	2019
Ozone (ppm), Worst 1-Hour[1]		0.073	0.062	0.071
Number of days above state standard	0.09 ppm	0	0	0
Ozone (ppm), 8-Hour Average[1]		0.066	0.054	0.064
Number of days above state or federal standard	0.070 ppm	0	0	0
Carbon Monoxide (ppm), Highest 8-Hour Average[2]		0.9	1.2	5.3
Number of days of above state or federal standard	9.0 ppm	0	0	0
Nitrogen Dioxide (ppm), Worst Hour[2]		0.034	0.047	0.030
Number of days above state standard	0.18 ppm	0	0	0
Number of days above federal standard	0.10 ppm	0	0	0
Sulfur Dioxide (ppm), Worst Hour[3]		0.0036	0.0069	0.00145
Number of days above state standard	0.25 ppm	0	0	0
Number of days above federal standard	0.075 ppm	0	0	0
Particulate Matter <10 microns (μg/m³), Worst 24 Hours[4]		95.3	78.9	89.0
Number of days above state standard	50 μg/m³	*	*	*
Number of days above federal standard	150 μg/m³	0	0	0
Particulate Matter <2.5 microns (μg/m³), Worst 24 Hours[1]		43.6	50.7	11.1
Number of days above federal standard	35 μg/m³	1	4	0
Lead (μg/m³), 3-Month Average[5]		0.07	0.08	0.07
Number of days above federal standard	0.15 μg/m³	0	0	0

[1] Data sourced from CARB and USEPA at the nearest monitoring station located at 35 Ford Road (Tularcitos Elementary School) in Carmel Valley.

[2] Data sourced from USEPA at the nearest monitoring station located at 867 East Laurel Drive in Salinas.

[3] Data sourced from USEPA at the nearest monitoring station located at 158b Jackson Street in San Jose. No monitoring stations within the NCCAB report ambient SO2 concentrations.

[4] Data sourced from CARB and USEPA at the nearest monitoring station located at 415 Pearl Street in King City.

[5] Data sourced from USEPA at the nearest monitoring station located at 2500 Cunningham Avenue in San Jose. No monitoring stations within the NCCAB report ambient lead concentrations.

ppm = parts per million; μg/m3 = micrograms per cubic meter; CARB = California Air Resources Board; USEPA = United States Environmental Protection Agency; NCCAB = North Central Coast Air Basin; SO2 = sulfur dioxide

* Insufficient data was available to determine the value.

Sources: CARB 2020c; USEPA 2020b

Ambient air monitoring for CO has not occurred in the NCCAB since 2012 due to low background concentrations. The most recently reported maximum eight-hour average CO concentration, reported at the Salinas #3 monitoring station, was 1.39 ppm in 2012, which is well below the state standard of 9.0 ppm. Similarly, ambient air monitoring for SO_2 has not occurred in the NCCAB since 2009 due to low background concentrations. The most recently reported maximum 24-hour average SO_2 concentration, reported at the former Davenport monitoring station (located approximately 30 miles northwest of the project area in Santa Cruz County) was 0.004 ppm in 2009, which is well below the state 24-hour average SO_2 standard of 0.04 ppm (CARB 2020c).

d. Sensitive Receptors in the Project Area

Certain population groups are considered more sensitive to air pollution than others, particularly children, the elderly, and acutely ill and chronically ill persons, especially those with cardio-respiratory diseases. According to the MBARD *CEQA Air Quality Guidelines* (2008), sensitive receptors typically include residences, schools, healthcare facilities, and other live-in housing facilities such as prisons or dormitories. The project area is approximately 55 square miles with sensitive receptors throughout, including single- and multi-family residences, schools, and the Community Hospital of the Monterey Peninsula. Schools in the project area include:

- Carmel River Elementary School
- Robert Down Elementary School
- Monte Vista Elementary School
- Carmel River Elementary School
- Del Rey Woods Elementary School
- Ord Terrace Elementary School
- Pacific Grove Middle School
- Seaside Middle School
- Walter Colton Middle School
- Monterey High School
- Monterey Bay Charter School
- Pacific Grover High School
- All Saints Day School
- York School
- Santa Catalina School,
- International School of Monterey
- The Stevenson Schools
- Chartwell School
- San Carlos School
- Carmelo School
- Bay View Academy (Lower Campus and Upper Campus)
- Martin Luther King Jr. School of the Arts
- Monterey Bay Christian School
- Big Sur Charter School
- Forest Hill School
- Carmel High School
- Betty Balling School
- St. Dunstan's Montessori School
- Carmel Valley High School
- Cypress Continuation High School
- Seaside High School

- Monterey Peninsula College
- A number of preschools

4.1.2 Regulatory Setting

The federal Clean Air Act (CAA) governs air quality in the United States and is administered by the USEPA. In addition to being subject to federal requirements, air quality in California is also governed by more stringent regulations under the California CAA, which is administered by CARB at the state level and by the Air Quality Management Districts (AQMDs) at the regional and local levels. MBARD regulates air quality at the regional and local levels in Monterey County.

The federal and state governments have authority under the federal and state CAAs to regulate emissions of airborne pollutants and have established the NAAQS and the CAAQS for the protection of public health. An air quality standard is defined as "the maximum amount of a pollutant averaged over a specified period of time that can be present in outdoor air without harming public health" (CARB 2020d). The NAAQS have been established for six criteria pollutants: O_3, CO, NO_2, SO_2, $PM_{10,}$ $PM_{2.5}$, and Pb. The CAAQS have been established for these and other pollutants, and some of the CAAQS are more stringent than the federal standards (CARB 2020e and 2020f). The NAAQS and CAAQS are designed to protect those segments of the public most susceptible to respiratory distress, such as children under the age of 14, the elderly (over the age of 65), persons engaged in strenuous work or exercise, and people with cardiovascular and chronic respiratory diseases (USEPA 2016c). The federal and state CAAs are described in more detail below.

a. Federal Regulations

Clean Air Act

The federal CAA was enacted in 1970 and amended in 1977 and 1990 (42 United States Code [USC] 7401) for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity. In 1971, to achieve the purposes of Section 109 of the CAA [42 USC 7409], the USEPA developed primary and secondary NAAQS for O_3, CO, NO_2, SO_2, $PM_{10,}$ $PM_{2.5}$, and Pb. The USEPA classifies specific geographic areas as either "attainment" or "nonattainment" areas for each pollutant based on the comparison of measured data with the NAAQS. States are required to adopt enforceable plans, known as a State Implementation Plans (SIPs), to achieve and maintain air quality meeting the NAAQS. State plans also must control emissions that drift across state lines and degrade air quality in downwind states. Table 4.1-2 lists the current federal standards for regulated pollutants. The NCCAB is currently designated attainment for all NAAQS (MBARD 2017).

Table 4.1-2 Federal and State Ambient Air Quality Standards

Pollutant	Federal Standard	California Standard
Ozone	0.070 ppm (8-hr avg)	0.09 ppm (1-hr avg) 0.070 ppm (8-hr avg)
Carbon Monoxide	35.0 ppm (1-hr avg) 9.0 ppm (8-hr avg)	20.0 ppm (1-hr avg) 9.0 ppm (8-hr avg)
Nitrogen Dioxide	0.100 ppm (1-hr avg) 0.053 ppm (annual avg)	0.18 ppm (1-hr avg) 0.030 ppm (annual avg)
Sulfur Dioxide	0.075 ppm (1-hr avg) 0.5 ppm (3-hr avg) 0.14 ppm (24-hr avg) 0.030 ppm (annual avg)	0.25 ppm (1-hr avg) 0.04 ppm (24-hr avg)
Lead	0.15 μg/m^3 (rolling 3-month avg) 1.5 μg/m^3 (calendar quarter)	1.5 μg/m^3 (30-day avg)
Particulate Matter (PM_{10})	150 μg/m^3 (24-hr avg)	50 μg/m^3 (24-hr avg) 20 μg/m^3 (annual avg)
Particulate Matter ($PM_{2.5}$)	35 μg/m^3 (24-hr avg) 12 μg/m^3 (annual avg)	12 μg/m^3 (annual avg)
Visibility-Reducing Particles	No Federal Standards	Extinction coefficient of 0.23 per kilometer – visibility of 10 miles or more (0.07 per kilometer – visibility of 30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent (8-hr avg)
Sulfates	No Federal Standards	25 μg/m^3 (24-hr avg)
Hydrogen Sulfide	No Federal Standards	0.03 ppm (1-hr avg)
Vinyl Chloride	No Federal Standards	0.01 ppm (24-hr avg)

ppm= parts per million; avg = average; μg/m^3 = micrograms per cubic meter

Source: CARB 2016

To derive the NAAQS, the USEPA reviews data from integrated science assessments and risk/exposure assessments to determine the ambient pollutant concentrations at which human health impacts occur, then reduces these concentrations to establish a margin of safety (USEPA 2018b). As a result, human health impacts caused by the air pollutants discussed in Section 4.1.1(b), *Air Pollutants of Primary Concern*, may affect people when ambient air pollutant concentrations are at or above the concentrations established by the NAAQS. The closer a region is to attaining a particular NAAQS, the lower the human health impact is from that pollutant (Brief for San Joaquin Valley Unified Air Pollution Control District 2018). Accordingly, ambient air pollutant concentrations below the NAAQS are considered to be protective of human health (CARB 2020d and 2020e). The NAAQS and the underlying science that forms the basis of the NAAQS are reviewed every five years to determine whether updates are necessary to continue protecting public health with an adequate margin of safety (USEPA 2015).

Safer Affordable Fuel-Efficient Vehicles Rule

On September 27, 2019, the USEPA and the National Highway Safety Administration published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program. The Part One Rule revokes California's authority to set its own GHG emissions standards and zero-emission vehicle mandates in California. To account for the effects of the Part One Rule, CARB released off-model adjustment factors on November 20, 2019 to adjust criteria air pollutant emissions outputs from the EMFAC model.

b. State Regulations

California Clean Air Act

The California CAA was enacted in 1988 (California Health & Safety Code Section 39000 et seq.). Under the California CAA, the State has developed the CAAQS, which are generally more stringent than the NAAQS. Table 4.1-2 lists the current State standards for regulated pollutants. In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. Similar to the federal CAA, the California CAA classifies specific geographic areas as either "attainment" or "nonattainment" areas for each pollutant, based on the comparison of measured data within the CAAQS. The NCCAB is currently designated nonattainment-transitional[2] for the State ozone standards and nonattainment for the State PM_{10} standard, but is in attainment for all other State standards (MBARD 2017).

Toxic Air Contaminants

In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health (Assembly Bill 1807: California Health & Safety Code Sections 39650 to 39674). The Legislature established a two-step process to address the potential health effects from TACs: 1) risk assessment (or identification) and 2) risk management (or control).

The California Air Toxics Program establishes the process for the identification and control of TACs and includes provisions to make the public aware of significant toxic exposures and to reduce risk. Additionally, the Air Toxics "Hot Spots" Information and Assessment Act (Assembly Bill 2588) was enacted in 1987 and requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, identify facilities having localized impacts, ascertain health risks, notify nearby residents of significant risks, and reduce those significant risks to acceptable levels. The Children's Environmental Health Protection Act (Senate Bill 25 [Chapter 731, Escutia, Statutes of 1999]) focuses on children's exposure to air pollutants. The act requires CARB to review its air quality standards from a children's health perspective, evaluate the statewide air quality monitoring network, and develop any additional air toxic control measures needed to protect children's health.

State Implementation Plan

The SIP is a collection of documents that set forth the State's strategies for achieving the NAAQS. In California, the SIP is a compilation of new and previously submitted plans, programs (such as monitoring, modeling, and permitting), district rules, State regulations, and federal controls. CARB is

[2] Areas are designated as nonattainment-transitional for ozone if no monitoring location in the nonattainment area has recorded more than three exceedance days during the previous calendar year (California Code of Regulations Section 70303.5).

the lead agency for the SIP under state law. Local air districts and other agencies, such as the Department of Pesticide Regulation and the Bureau of Automotive Repair, prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the USEPA for approval and publication in the Federal Register. All of the items included in the California SIP are listed in 40 Code of Federal Regulations 52.220. The air pollution control district for each county adopts rules, regulations, and programs to attain federal and state air quality standards and appropriates money (including permit fees) to achieve these objectives. As the regional air quality management district, MBARD is responsible for preparing and implementing the portion of the SIP applicable to the NCCAB.

c. Regional Regulations

Monterey Bay Air Resources District

Local control in air quality management is provided by CARB through county-level or regional (multi-county) AQMDs. CARB establishes statewide air quality standards and is responsible for control of mobile emission sources, while the local APCDs are responsible for enforcing standards and regulating stationary sources. The project area is located in Monterey County, which is under the jurisdiction of MBARD.[3]

MBARD is responsible for assuring that the federal and State ambient air quality standards are attained and maintained in the NCCAB. The agency is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, conducting public education campaigns, and other activities.

In March 2017, MBARD adopted the *2012-2015 Air Quality Management Plan* (2015 AQMP) as an update to the 2012 AQMP. The 2015 AQMP assesses and updates elements of the 2012 AQMP, including ambient air quality data, emission inventory trends, information on ozone transport, control measures, mobile source programs, emission reduction strategies, and growth forecasts (MBARD 2017). The 2015 AQMP only addresses attainment of the State eight-hour ozone standard because in 2012, the USEPA designated the NCCAB as in attainment for the current national eight-hour ozone standard of 0.075 ppm. In October 2015, the federal eight-hour ozone standard was reduced to 0.070 ppm; however, the NCCAB continues to be in attainment with the federal eight-hour ozone standard (MBARD 2017).

MBARD also promulgates a number of rules and regulations, some of which would be applicable to existing and proposed operations and maintenance activities associated with the project. Relevant rules include, but are not limited to:

- **Rule 402 (Nuisances).** No person shall discharge from any source whatsoever such quantities of air contaminants or other materials which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or which endanger the comfort, repose, health, or safety of any such persons or the public; or which cause, or have a natural tendency to cause, injury or damage to business or property.
- **Rule 426 (Architectural Coatings).** This rule limits emissions of VOCs from the use of architectural coatings and sets VOC content limits for a variety of coating categories, including

[3] MBARD was formerly called the Monterey Bay Unified Air Pollution District; accordingly, documents authored by the Monterey Bay Unified Air Pollution District are cited as authored by MBARD in this document.

flat, nonflat, nonflat-high gloss, and specialty coatings. Specifically, Rule 426 limits the VOC content of flat coatings to 50 grams per liter and nonflat coatings to 100 grams per liter. Persons are prohibited from manufacturing, blending, repackaging for use, supplying, selling, soliciting, or applying architectural coatings that exceed these limits.

- **Rule 434 (Coating of Metal Parts and Products).** This rule limits emissions of VOCs from application of coatings to metal parts and products and sets VOC content limits for a variety of coating categories, including general and specialty, and for different application methods, such as baked and air-dried.

d. Local Regulations

The following sections detail air quality goals and policies from local general plans that would be applicable to the proposed project.

County of Monterey

The County of Monterey General Plan Conservation and Open Space Element (2010) contains the following goal and policies that would be applicable to the proposed project. The goal is supported by 15 policies that promote conservation of natural resources, encourage alternatives to vehicle transportation, and require compliance with MBARD regulations and pollution control measures.

Goal OS-10 Provide for the protection and enhancement of Monterey County's air quality without constraining routine and ongoing agricultural activities.

Policy OS-10.1 Land use policy and development decisions shall be consistent with the natural limitations of the County's air basins.

Policy OS-10.6 The MBARD's air pollution control strategies, air quality monitoring, and enforcement activities shall be supported.

City of Seaside

The City of Seaside General Plan Conservation/Open Space Element (2003) contains the following goal and policy that would be applicable to the proposed project. The goal and policy are supported by several implementation plans, which include coordination with MBARD, support of alternative transportation development, use of the California Environmental Quality Act to mitigate potential air quality impacts, and expansion of local retail and employment opportunities.

Goal COS-6 Protect and improve local and regional air quality.

Policy COS-6.1 Integrate air quality planning with land use, economic development, and transportation planning.

The City of Seaside is currently preparing *Draft Seaside 2040*, a comprehensive General Plan update, which includes updated goals and policies. The following policy under Goal HSC-1 in *Draft Seaside 2040* would be applicable to the proposed project (City of Seaside 2019):

Policy **Regional presence as sustainability partner.** Play an active role in the Association of Monterey Bay Area Governments and the development and implementation of the Sustainable Communities Strategy. Encourage land use patterns that encourage walking, conserve land, energy, and water resources, support active transportation, reduce vehicle trips, and improve air quality.

City of Monterey

The City of Monterey General Plan Conservation Element (2016) contains the following goal and policies that would be applicable to the proposed project:

Goal c Reduce fixed source and transportation-based air pollution.

Policy c.1 Reduce air pollution generated by motor vehicles by encouraging the use of public transit, carpooling, bicycles, and walking as alternatives. Policies to achieve these goals are found in the Circulation Element. Promote cooperation with local and state agencies to develop programs to reduce sources of air pollution.

Policy c.3 Promote cooperation with local and state agencies to develop programs to reduce sources of air pollution.

City of Del Rey Oaks

The City of Del Rey Oaks General Plan Natural Resources Element (1997) contains the following goal that would be applicable to the proposed project:

Goal C/OS-13 The City will encourage the improvement of air quality in Del Rey Oaks and in the region by implementing the measures described in the Monterey Bay Air Quality Management Plan. Such measures include, but are not limited to, measures to reduce dependence on the automobile and encourage the use of alternate modes of transportation such as buses, bicycling, and walking.

City of Sand City

The Sand City General Plan Conservation and Open Space Element (2002) includes the following goal and policies that would be applicable to the proposed project:

Goal 5.8 Minimize public health hazards due to air pollution and reduce the generation of air pollutants.

Policy 5.8.2 The City shall continue to work with MBARD and CARB in incorporating local and regional clean air plans into City planning activities.

Policy 5.8.6 The City shall encourage the use of alternative forms of transportation by incorporating public transit, bicycle, and pedestrian modes in County planning processes and by requiring new development to provide adequate pedestrian and bicycle facilities.

City of Pacific Grove

The Pacific Grove General Plan Health and Safety Element (1994) contains the following goal and policy that would be applicable to the proposed project:

Goal 3 Promote attainment, and insofar as possible, improve air quality in Pacific Grove and the Monterey Bay area.

Policy 12 Continue to support the efforts of the Transportation Agency for Monterey County to implement the Monterey County Congestion Management Plan.

City of Carmel-by-the-Sea

The Carmel-by-the-Sea General Plan/Local Coastal Plan Open Space and Conservation Element (2009) contains the following goals, objectives, and policy that would be applicable to the proposed project:

G7-3 To reduce release of airborne pollutants and contribution to greenhouse gases.

O7-3 Promote planning and programs that result in the reduction of airborne pollutants.

P7-9 Coordinate air quality planning efforts with local, regional, and state agencies, and evaluate the air quality impacts of proposed plans and development projects.

O7-4 Reduce vehicle trips and emissions, and improve vehicle efficiency, as a means of limiting the volume of pollutants generated by traffic.

4.1.3 Impact Analysis

a. Methodology and Significance Thresholds

Methodology

The analysis of air quality impacts conforms to the methodologies recommended in MBARD's *CEQA Air Quality Guidelines* (2008). This analysis considers air emissions associated with existing and future operation and maintenance activities of the proposed project, including emissions associated with vehicle trips along area roadways. Given that the proposed project does not include any new construction, no construction emissions would be generated, and this activity is not discussed further. This analysis focuses on emissions from operations and maintenance activities and the potential for the proposed project to produce air pollutant emissions beyond existing baseline conditions. Air emissions are analyzed based on the significance thresholds contained in Appendix G of the State CEQA Guidelines as well as the significance thresholds provided by MBARD.

Emissions Quantification

This analysis considers air emissions associated with operation and maintenance of the proposed project, including emissions from vehicles used to operate and maintain the water supply system. The proposed project would include the District's acquisition and subsequent operation of the Monterey Water System (MWS). The MWS would maintain its existing size and capacity, including, but not limited to, the lease of one desalination plant, 33 water wells, six water treatment facilities, 614 miles of pipe, the Monterey Pipeline and Pump Station, 74 pump stations, 108 finished water storage facilities, 3,496 fire hydrants, an estimated 12,000 distribution valves, and 117 assessor parcels with a total area of approximately 4,753 acres along with planned facilities associated with the Monterey Peninsula Water Supply Project, including the Carmel Pump Station, the 6.4 million gallon per day Desalination Plant, and associated infrastructure improvements. No new facilities are proposed under the project; however, operation and maintenance events may occur as part of the ongoing operation and maintenance of the system, similar to baseline conditions. As discussed in Section 2, *Project Description*, the District would operate the system out of the existing California American Water Company (CalAm) main office at 511 Forest Lodge Road, #100 in Pacific Grove, and therefore there would be little to no change in the length, distribution, or number of vehicle trips required to operate and maintain the MWS.

The District would offer employment to approximately 77 of the 81 existing staff CalAm staff associated with the MWS and would add approximately 10 additional positions in District administration related to billing, finance, and customer service.[4] In total, there would be approximately 87 employees hired by the District associated with the MWS, which would be a net increase of approximately six employees as compared to existing conditions (87 District employees – 81 existing CalAm employees). In addition, this analysis conservatively assumes that CalAm would hire approximately six additional employees to operate and maintain the Central Satellites (e.g., one meter reader/utility worker, two operators, and three field crew).[5] As a result, this analysis assumes the project would result in a net increase of approximately 12 employees (approximately 6 District employees + approximately 6 CalAm employees). As discussed in Section 4.5, Transportation, the net increase of approximately 12 employees would result in net increases of approximately 24 daily trips and approximately 600 daily VMT. The proposed project does not include acquisition of the Central Satellites, which are small stand-alone water systems throughout Monterey County that consist of the Ambler Park, Chualar, Garrapata, Ralph Lane, and Toro systems. CalAm would retain ownership of these facilities and would continue to perform operations and maintenance activities related to these facilities. Vehicle trips associated with the Central Satellites would be required for water quality sampling, inspections, repairs of leaks and breaks, backflow testing, dead-end flushing, meeting vendors for valve exercising or tank inspections, and meter reading, among other activities. As discussed in Section 4.5, Transportation, the project would result in net increases of approximately 38 maximum daily trips and approximately 414 maximum daily VMT associated with the Central Satellites.[6] In total, the project would result in net increases of approximately 62 daily trips (approximately 24 trips for employee commutes + 38 trips for Central Satellites) and approximately 1,014 daily VMT (600 VMT for employee commutes and 414 VMT for Central Satellites). These vehicle trips would emit criteria air pollutants during start-up and while in motion.

Criteria air pollutant emissions associated with the net change in vehicle trips and VMT under the proposed project were estimated using vehicle emissions factors (EFs) for the Monterey County region for year 2020 as reported by CARB's EMFAC2017 Web Database v1.0.2 tool for EMFAC2011 vehicle categories (CARB 2020g). It was assumed that all net new vehicle trips would be gasoline-fueled light-duty trucks (gross vehicle weight rating of less than 6,000 pounds and equivalent test weight less than or equal to 3,750 pounds; LDT1).[7] Additional model inputs include aggregated model years and aggregated speeds. This analysis uses EFs for year 2020, which is a conservative assumption given that the proposed acquisition would occur in a later year at which time vehicle fuel efficiency will have improved in accordance with federal and state regulatory standards, which will correspondingly decrease criteria air pollutant emissions. No adjustments to the EFs are needed to account for the SAFE Rule Part One because this rule only impacts fuel economy and emissions standards for years 2021 to 2050, not those for year 2020 (CARB 2019). The full output from the EMFAC2017 Web Database can be found in Appendix B.

[4] It is possible that some of the 77 existing CalAm employees who are offered employment by the District would instead pursue employment opportunities at CalAm or another employer or retire. In these events, the District would hire other employees to fill the open positions. Given the nature of these employment opportunities, it is likely that non-CalAm employees that would be hired by the District currently live in the Monterey Peninsula area. Regardless, the key metric for this analysis is the number of net new employees hired by the District after acquisition of the MWS, which would be six.

[5] Although this scenario is possible, it is also possible that CalAm would utilize existing employees to operate and maintain the Central Satellites rather than hiring additional employees. As such, this is a conservative assumption for the purposes of analysis.

[6] As further detailed in Section 4.5, *Transportation*, maximum daily trip estimates conservatively assume that all daily trips for each operations and maintenance activity would occur on the same day. In reality, it is likely that daily trips for different activities would occur on different days in any given month.

[7] Although this scenario is possible, it is likely that some vehicle trips would be made using light-duty automobiles (LDA), which emit fewer criteria air pollutants than light-duty trucks. However, the assumption that all vehicle trips would be made using LDT1 vehicles provides a more conservative estimate of mobile source emissions and is therefore used herein.

Human Health Impacts

The methodology in this report makes a reasonable effort to substantively connect any significant and unavoidable air quality impacts to the likely human health consequences, consistent with the California Supreme Court's decision regarding *Sierra Club v. County of Fresno* (Friant Ranch, L.P.) (2018). Project emissions that do not cause an exceedance of or contribute to a violation of the NAAQS or CAAQS would not have significant health impacts because the NAAQS and CAAQS are set to be protective of human health. MBARD bases its significance thresholds on the federal and California CAAs. MBARD's thresholds for evaluating VOC, NO_X, and CO emissions are consistent with the federal CAA de minimis thresholds.[8] The de minimis thresholds are used in the USEPA's general conformity process and are the emission levels at which an activity would not cause or contribute to a violation of the NAAQS, worsen an existing violation of the NAAQS, or delay attainment of the NAAQS (USEPA 2017b). Therefore, these thresholds are designed to be protective of public health because they are consistent with the NAAQS.

MBARD's thresholds for evaluating PM_{10} and SO_2 emissions are consistent with the emission thresholds established by MBARD Rule 207 (New Source Review) for requiring use of best available control technology (MBARD 2011).[9] The purpose of Rule 207 is to implement the requirements of the federal and California CAAs. Under the Prevention of Significant Deterioration program, the federal CAA requires emissions from new or modified stationary sources to be restricted in places where air quality currently exceeds one or more NAAQS. One of the purposes of the Prevention of Significant Deterioration program is to protect public health and welfare (USEPA 2019b). The California CAA requires each air district to implement a stationary source control program that achieves no net increase in emissions of criteria pollutants (or their precursors) for which the region is nonattainment (CARB 2020h). Therefore, these thresholds are designed to be protective of public health because they are consistent with the NAAQS and CAAQS.

Because project-level significance thresholds established by MBARD are set at the level at which a project would cause or have a cumulatively considerable contribution to an exceedance of a federal or state ambient air quality standard, these thresholds are protective of public health. Therefore, if a project's air pollutant emissions would not exceed the significance thresholds, the project would not cause or contribute to the human health impacts described under Section 4.1.1(b), *Air Pollutants of Primary Concern*.

Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, the proposed project would result in a significant impact to air quality if it would:

1. Conflict with or obstruct implementation of the applicable air quality plan
2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard
3. Expose sensitive receptors to substantial pollutant concentrations

[8] The de minimis threshold for VOC and NO_X emissions in severe non-attainment areas is 25 tons per year, which equates to approximately 137 pounds per day (i.e., the MBARD significance threshold for operational VOC and NO_X emissions under CEQA). The de minimis threshold for CO emissions in maintenance areas is 100 tons per year, which equates to approximately 550 pounds per day (i.e., the MBARD significance threshold for operational CO emissions under CEQA).

[9] Per Table 4.1.1 in Rule 207, the emission thresholds for best available control technology are 82 pounds per day for PM_{10} and 150 pounds per day for SO_2 (i.e., the MBARD significance thresholds for operational PM_{10} and SO_2 emissions under CEQA).

4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people

To determine whether a significant air quality impact would occur, emissions generated by the proposed project were compared to MBARD's thresholds for operational emissions. Based on criteria set forth in MBARD's *CEQA Air Quality Guidelines* (2008), the proposed project's impacts on criteria air pollution would be significant if the proposed project would result in air pollutant emissions during construction or operation that exceed the thresholds in Table 4.1-3.

Table 4.1-3 Operational Air Quality Thresholds of Significance

Pollutant	Source	Threshold of Significance
VOC	Direct and Indirect	137 lbs/day
NO_X	Direct and Indirect	137 lbs/day
PM_{10}	On-site	82 lbs/day[2]
CO	Mobile	LOS at intersection/road segment degrades from D or better to E or F or V/C ratio at intersection/road segment at LOS E or F increases by 0.05 or more or delay at intersection at LOS E or F increases by 10 seconds or more or reserve capacity at unsignalized intersection at LOS E or F decreases by 50 or more
CO	Direct	550 lbs/day
SO_X, as SO_2	Direct	150 lbs/day

[1] This threshold only applies if construction is located nearby or upwind of sensitive receptors. In addition, a significant air quality impact related to PM_{10} emissions may occur if a project uses equipment that is not "typical construction equipment" as specified in Section 5.3 of the MBARD CEQA Guidelines.

[2] The District's operational PM_{10} threshold of significance applies only to on-site emissions, such as project-related exceedances along unpaved roads. These impacts are generally less than significant. For large development projects, almost all travel is on paved roads, and entrained road dust from vehicular travel can exceed the significance threshold.

Notes: lbs/day = pounds per day; PM_{10} = particulate matter with a diameter of 10 micrometers or less; VOC = volatile organic compounds; NO_X = oxides of nitrogen; CO = carbon monoxide; SO_X = oxides of sulfur; SO_2 = sulfur dioxide

Source: MBARD 2008

The CO thresholds provided by MBARD are designed to screen out from further analysis projects that would have a less than significant impact to CO; however, projects that exceed these thresholds would not necessarily result in a hotspot. Localized CO concentrations are primarily the result of the volume of cars along a road and the level of emissions generated by vehicles; restricted vehicular traffic flows can contribute to higher volumes of vehicles on a given roadway in a period of time, but are not the cause of high CO concentrations. Stringent vehicle emission standards in California have reduced the level of CO emissions generated by vehicles over time such that CO hotspots are rarely a concern, except for roadways with very high traffic volumes. The Bay Area Air Quality Management District (BAAQMD) has established a volume of 44,000 vehicles per hour as the level above which traffic volumes may contribute to a violation of CO standards (BAAQMD 2017). The NCCAB and the San Francisco Bay Area Air Basin (the jurisdiction of the BAAQMD, which is the air district immediately adjacent to MBARD to the north) are both in attainment for the CAAQS and NAAQS for carbon dioxide and have not reported exceedances of the CO standard at local monitoring stations for the last two decades (CARB 2020c; USEPA 2020b; BAAQMD 2017). Therefore, given the similar ambient air quality conditions for CO in both air basins, it is appropriate to use the BAAQMD threshold in this analysis. The BAAQMD threshold is applied in the following impact analysis if the proposed project exceeds the MBARD screening thresholds presented above to determine whether the proposed project would result in an exceedance of CO standards.

The MBARD provides several criteria for determining AQMP consistency based on the type of project. Criteria are provided for population-related projects (i.e., projects related directly to population growth such as residential projects and commercial/industrial/institutional projects intended to meet the needs of the population), non-residential population related commercial/industrial/institutional projects (e.g., hotels and motels); stationary and area source emissions projects subject to MBARD permit authority; wastewater treatment projects; and transportation projects. The proposed project does not precisely fall within any of these project types; however, because it is a water system that serves the needs of the population of the project area and includes equipment similar in nature to industrial land uses, it is best characterized as an industrial project intended to the meet the needs of the current and forecast population. According to MBARD (2008), an industrial project intended to meet the needs of the population would be inconsistent with the 2015 AQMP if the estimated current population of the county in which the project is to be located exceeds the population forecast for the appropriate five-year increment utilized in the AQMP. The project would also be inconsistent with the 2015 AQMP if operational emissions of ozone precursors would exceed the significance thresholds established by MBARD, which are intended to set the allowable limit that a project can emit without impeding or conflicting with the AQMP's goal of attaining ambient air quality standards (Duymich 2018). In either case, if the project would be inconsistent with the 2015 AQMP, it would also have a cumulatively considerable contribution to significant cumulative air quality impacts.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project conflict with or obstruct implementation of the applicable air quality plan?

Impact AQ-1 THE PROPOSED PROJECT WOULD NOT CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF THE 2015 AQMP. NO IMPACT WOULD OCCUR.

The most recent air quality plan adopted by MBARD is the 2015 AQMP. The 2015 AQMP only addresses attainment of the State eight-hour ozone standard because in 2012, the USEPA designated the NCCAB as attainment for the then-current federal eight-hour ozone standard of 0.075 ppm. In October 2015, the federal eight-hour ozone standard was reduced to 0.070 ppm; however, the NCCAB continues to be in attainment with the federal eight-hour ozone standard (MBARD 2017).

A significant impact to air quality would occur if buildout of the proposed project would conflict with or obstruct implementation of the 2015 AQMP. MBARD uses growth forecasts provided by the Association of Monterey Bay Area Governments to project population-related emissions, which are used in developing the AQMP for the NCCAB. Because the proposed project is best characterized as an industrial project intended to the meet the needs of the current and forecast population, MBARD states that consistency with the AQMP should be determined by comparing the estimated current population of the county in which the project is to be located (i.e., Monterey County) with the applicable population forecast for the appropriate five-year increment utilized in the AQMP (MBARD 2008). If the estimated current population does not exceed the forecasts, emissions are deemed to be consistent with the AQMP.

The current population of Monterey County is estimated at 445,414 (California Department of Finance 2019). The proposed project would not directly induce additional population growth because it does not include construction of residential units. The project would require

approximately 12 net new District and CalAm employees. Given the nature of these employment opportunities, it is likely that these employees would be drawn from the existing workforce in Monterey County. However, for the purpose of this analysis, it is conservatively assumed that these approximately 12 net new employees would relocate from outside the area for the positions, and thus would be new residents of Monterey County.

The population growth projections used in the 2015 AQMP forecast that the population of Monterey County will reach approximately 447,516 residents by 2020 (MBARD 2017). The addition of two new residents would result in a total population of approximately 445,426 (445,414 + 12). Therefore, the current population of Monterey County plus the project's indirect population growth does not exceed the population forecast utilized in the 2015 AQMP for year 2020 and is therefore within the applicable assumptions of the air pollutant emissions forecast contained in the AQMP. Furthermore, as discussed under Impact AQ-2 below, operational emissions generated by the proposed project would not exceed MBARD thresholds for ozone precursor emissions. Therefore, the proposed project would not conflict with or obstruct the implementation of the 2015 AQMP. No impact would occur.

Mitigation Measures

No mitigation measures are required.

Threshold 2:	Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Impact AQ-2 THE PROPOSED PROJECT WOULD NOT RESULT IN A CUMULATIVELY CONSIDERABLE NET INCREASE OF ANY CRITERIA POLLUTANT FOR WHICH THE MBARD REGION IS IN NONATTAINMENT UNDER APPLICABLE FEDERAL OR STATE AMBIENT AIR QUALITY STANDARDS. THEREFORE, IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As discussed in Section 4.1.2, *Regulatory Setting*, the NCCAB is currently designated nonattainment-transitional for the State ozone standards and nonattainment for the State PM_{10} standard, but is in attainment for all other federal and state standards.[10] Therefore, this analysis focuses on air quality impacts related to those criteria pollutants for which the NCCAB is nonattainment, which are ozone and PM_{10}.

As discussed under Section 4.5.3(a), *Methodology and Significance Thresholds*, this analysis assumes there would be little to no change in the length, distribution, or number of vehicle trips required to operate and maintain the MWS after its acquisition. Therefore, this analysis focuses on emissions generated by the net change in vehicle trips and VMT due to the net increase of approximately 12 employees hired by the District and CalAm as well as CalAm's operation and maintenance of the Central Satellites separately from the MWS following the District's acquisition. Vehicle trips associated with the net increase in employees would be required for home to work commute trips, and vehicle trips associated with the Central Satellites would be required for water quality sampling, inspections, repairs of leaks and breaks, backflow testing, dead-end flushing, meeting vendors for valve exercising or tank inspections, and meter reading, among other activities.

[10] Areas are designated as nonattainment-transitional for ozone if no monitoring location in the nonattainment area has recorded more than three exceedance days during the previous calendar year (California Code Section 70303.5).

Table 4.1-4 summarizes criteria air pollutant emissions generated by the potential net increases in daily vehicle trips and VMT under the proposed project. As shown therein, emissions of VOC, NO_X, CO, SO_2, PM_{10}, and $PM_{2.5}$ would not exceed MBARD thresholds. Therefore, impacts would be less than significant.

Table 4.1-4 Estimated Operational Emissions

Source	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Project Emissions (lbs/day)	**0.4**	**0.4**	**4.0**	**<0.1**	**0.1**	**<0.1**
MBARD Threshold	137	137	550	150	82	N/A
Threshold Exceeded?	No	No	No	No	No	N/A

VOC = volatile organic compounds; NO_X = oxides of nitrogen; CO = carbon monoxide; SO_X = oxides of sulfur; PM_{10} = particulate matter with a diameter of 10 micrometers or less; $PM_{2.5}$ = particulate matter with a diameter of 2.5 micrometers or less; lbs/day = pounds per day; N/A = not applicable (MBARD has not adopted a threshold for evaluating operational $PM_{2.5}$ emissions)

Notes: All numbers have been rounded to the nearest tenth.

Source: See Appendix B for emission calculations.

Following the District's acquisition of the MWS under the proposed project, it likely that the CalAm executive team and staff based out of San Diego and New Jersey would need to travel less often to the project area, Sacramento, and San Francisco for conferences, hearings, settlement meetings, and rate cases.[11] In addition, it is likely that some travel by various stakeholders (e.g., California Public Utilities Commission, other public agencies) and members of the public between San Francisco/Sacramento and the project area for hearings and other meetings would also be reduced. The potential reduction in travel associated with the MWS would result in reduced air pollutant emissions in the MBARD jurisdictional area, which would offset some or all of the emissions associated with the proposed project. However, specific information on the change in travel by the CalAm executive team and staff, various stakeholders, and members of the public is not available at this time, and there are multiple variables (e.g., shifting patterns of teleworking and regional and airline travel due to COVID-19) that may also affect future travel patterns. Therefore, this analysis conservatively does not quantify or take credit for this emission reduction. Nevertheless, the potential reduction in travel and associated air pollutant emissions would further reduce project impacts that are already less than significant.

As discussed in Section 4.1.2, *Regulatory Setting*, because the NCCAB is currently designated nonattainment-transitional for the State ozone standards and nonattainment for the State PM_{10} standard, significant adverse health impacts related to these pollutants are already occurring in the region. As discussed under Section 4.1.1(b), *Air Pollutants of Primary Concern*, the health impacts of ozone include respiratory and eye irritation and possible changes in lung functions, and the health impacts of PM_{10} include respiratory irritation, reduced lung function, aggravation of cardiovascular disease, and cancer. However, the disconnect between the tonnage of pollutants emitted and the localized concentrations of ozone and PM_{10} is important because it is not necessarily the tonnage of pollutants emitted that causes human health effects; rather, it is the concentrations of ozone and PM that cause these effects. As discussed in Section 4.1.3(a), *Methodology and Significance Thresholds*, because emissions of ozone precursors and PM_{10} would not exceed MBARD thresholds,

[11] It is possible that CalAm will re-locate its main California office to Sacramento in 2024; however, this EIR analyzes project impacts as compared to existing baseline conditions at the time of publication of the NOP (April 2020). As of April 2020, the CalAm headquarters remains in San Diego. Regardless, this analysis does not quantify or take credit for these potential trip reductions; as such, the location of the CalAm headquarters does not influence the analysis presented herein.

which are set at the levels at which a project would cause or have a cumulatively considerable contribution to an exceedance of a federal or state ambient air quality standard, the project's incremental contribution to these cumulative adverse health impacts would not be cumulatively considerable.

Mitigation Measures

No mitigation measures are required.

Threshold 3:	Would the project expose sensitive receptors to substantial pollutant concentrations?

Impact AQ-3 THE PROPOSED PROJECT WOULD NOT EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL CONCENTRATIONS OF CO OR TACS. THEREFORE, IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As discussed in Section 4.1.1(d), *Sensitive Receptors in the Project Area*, the project area is approximately 55 square miles with sensitive receptors throughout, including single- and multi-family residences, schools, and the Community Hospital of the Monterey Peninsula.

Carbon Monoxide Hotspots

As discussed in Section 4.5, *Transportation*, the proposed project would result in approximately 62 net new ADT on roadways in the project area. Areas with high vehicle density, such as congested intersections, have the potential to create localized CO hotspots and could potentially expose sensitive receptors to harmful levels of pollution. Localized CO "hotspots" can be created at intersections where traffic levels are sufficiently high such that the local CO concentration exceeds the NAAQS of 35.0 ppm or the CAAQS of 20.0 ppm.

Net new project-related trips would primarily utilize regional roadways (i.e., SR 1, SR 68 West, SR 68 East) to travel through the project area and surrounding region, and project-related ADT would increase traffic volumes on these roadways by between approximately 0.08 and 1.9 percent.[12] As discussed in Section 4.1.3(a), *Methodology*, the BAAQMD, which is the air district immediately adjacent to MBARD to the north, has determined that a volume of 44,000 vehicles per hour is the level above which traffic volumes may contribute to a violation of CO standards (BAAQMD 2017).[13] Average peak hour traffic on regional roadways in the project area ranges from 550 to 7,900 vehicles per hour; therefore, the addition of 62 project-related trips would not have the potential to increase existing traffic volumes to more than 44,000 vehicles per hour (California Department of Transportation 2020). As a result, the project would not expose sensitive receptors to substantial CO concentrations, and impacts would be less than significant.

[12] Only the vehicle trips associated with the Central Satellites that are within the project area would be attributable to the proposed project because the project would potentially result in duplication of vehicle trips in the project area due to operation and maintenance of the Central Satellites separately from the MWS. The number of vehicle trips outside the project area would remain the same as existing conditions because these trips would not be duplicated by separate operations for the Central Satellites and the MWS given that District employees would only travel as far as the project area boundary to service the MWS. Refer to Section 4.5, *Transportation,* for additional detail.

[13] The NCCAB and the San Francisco Bay Area Air Basin (the jurisdiction of the BAAQMD) are both in attainment for the CAAQS and NAAQS for carbon dioxide and have not reported exceedances of the CO standard at local monitoring stations for the last two decades (CARB 2020c; USEPA 2020b; BAAQMD 2017). Therefore, given the similar ambient air quality conditions for CO in both air basins, it is appropriate to use the BAAQMD threshold in this analysis.

Toxic Air Contaminants

Typical sources of acutely and chronically hazardous TACs identified by CARB include distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities (CARB 2005). MBARD also identifies additional common sources of TACs including diesel-fueled internal combustion engines and parking areas for diesel-fueled heavy-duty trucks and buses (MBARD 2008). The proposed project would not include TAC sources; therefore, the proposed project would not result in the exposure of sensitive receptors to significant amounts of carcinogenic or toxic air contaminants. No impact would occur.

Mitigation Measures

No mitigation measures are required.

Threshold 4:	Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact AQ-4 THE PROPOSED PROJECT WOULD NOT CREATE OBJECTIONABLE ODORS THAT WOULD ADVERSELY AFFECT A SUBSTANTIAL NUMBER OF PEOPLE. NO IMPACT WOULD OCCUR.

Land uses typically producing objectionable odors include landfills, rendering plants, chemical plants, agricultural uses, wastewater treatment plants, and refineries (MBARD 2008). The existing MWS does not include these uses and therefore does not generate odors under baseline conditions. The proposed project would not change the nature or operations of the existing MWS infrastructure; therefore, the proposed project would not result in other emissions, such as those leading to odors, that would adversely affect a substantial number of people. No impact would occur.

Mitigation Measures

No mitigation measures are required.

c. Cumulative Impacts

The proposed project would result in no impact related to AQMP consistency, TACs, and odors; therefore, no cumulative impact would occur with respect to these issues.

Criteria Air Pollutant Emissions

According to MBARD, a project's cumulative air quality impacts should be evaluated for ozone, CO, and PM_{10} (MBARD 2008). The geographic scope for cumulative criteria air pollutant emission impacts is the NCCAB, which is comprised of Monterey, Santa Cruz, and San Benito counties. This geographic scope is appropriate for criteria air pollutants because air quality is affected by the climatic conditions, regional topography, and atmospheric conditions of a region. Development that is considered part of the cumulative analysis includes buildout of local city General Plans; county General Plans for the counties of Monterey, Santa Cruz, and San Benito; and other development projects proposed within the jurisdiction of MBARD.

Ozone

Because the area under the jurisdiction of MBARD is designated a nonattainment-transitional area for the State ozone standards, there is an existing significant cumulative air quality impact related to

ozone. According to MBARD, if the proposed project would be inconsistent with the AQMP, the proposed project would have a cumulatively considerable contribution to this significant cumulative air quality impact related to ozone (MBARD 2008). As discussed under Impact AQ-1, the proposed project would be consistent with MBARD's AQMP. Therefore, the proposed project would not have a cumulatively considerable contribution to the significant cumulative air quality impact related to ozone.

PM_{10}

Because the area under the jurisdiction of MBARD is designated a nonattainment area for the State PM_{10} standard, there is an existing significant cumulative air quality impact related to PM_{10}. According to MBARD, if the ambient PM_{10} levels exceed the CAAQS in the project area and the proposed project would emit more than 82 pounds of PM_{10} per day, the proposed project would have a cumulatively considerable contribution to this significant cumulative PM_{10} impact (MBARD 2008). As shown in Table 4.1-1, ambient air quality in the project area exceeded the CAAQS for PM_{10} in 2017, 2018, and 2019. However, as shown in Table 4.1-4 under Impact AQ-2, operation of the proposed project would not generate more than 82 pounds of PM_{10} emissions per day. Therefore, the proposed project would not have a cumulatively considerable contribution to the significant cumulative air quality impact related to PM_{10}.

Carbon Monoxide

According to MBARD, the proposed project would have a cumulatively considerable contribution to a significant cumulative CO impact if traffic under cumulative plus project conditions caused CO concentrations to exceed the NAAQS for CO of 35.0 ppm or the CAAQS for CO of 20.0 ppm (MBARD 2008). As discussed under *Methodology*, localized CO concentrations are the result of the volume of cars along a road and the level of emissions generated by vehicles, rather than the flow of traffic, and vehicle CO emissions have declined over time due to stringent state standards for vehicle emissions. In addition, vehicle CO emissions will continue to decline as more stringent standards are put in place. As discussed under Impact AQ-3, MBARD provides screening thresholds for CO hotspot impacts but does not have a standard for assessing whether a project's CO hotspot impacts would be significant. Therefore, the CO threshold from BAAQMD, which is the air district immediately adjacent to MBARD to the north, is utilized in this analysis. The NCCAB and the San Francisco Bay Area Air Basin (the jurisdiction of the BAAQMD) are both in attainment for the CAAQS and NAAQS for carbon dioxide and have not reported exceedances of the CO standard at local monitoring stations for the last two decades (CARB 2020c; USEPA 2020b; BAAQMD 2017). Therefore, given the similar ambient air quality conditions for CO in both air basins, it is appropriate to use the BAAQMD threshold in this analysis. BAAQMD has determined that a volume of 44,000 vehicles per hour is the level above which traffic volumes may contribute to a violation of CO standards (BAAQMD 2017). As discussed under Impact AQ-3, average peak hour traffic on regional roadways in the project area ranges from 550 to 7,900 vehicles per hour; therefore, it is unlikely that cumulative and cumulative plus project traffic volumes would have the potential to exceed 44,000 vehicles per hour (California Department of Transportation 2020). Therefore, there would be no significant cumulative impact related to CO hotspots at congested intersections, and the proposed project would not have a cumulatively considerable contribution to a significant cumulative impact associated with CO.

4.2 Greenhouse Gas Emissions

The following discussion focuses on the greenhouse gas (GHG) emissions associated with the proposed project as well as the project's consistency with applicable plans, policies, and regulations adopted for the purposes of reducing GHG emissions.

4.2.1 Setting

a. Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. The term "climate change" is often used interchangeably with the term "global warming," but climate change is preferred because it conveys that other changes are happening in addition to rising temperatures. The baseline against which these changes are measured originates in historical records that identify temperature changes that occurred in the past, such as during previous ice ages. The global climate is changing continuously, as evidenced in the geologic record which indicates repeated episodes of substantial warming and cooling. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming over the past 150 years. The United Nations Intergovernmental Panel on Climate Change (IPCC) expressed a high degree of confidence (95 percent or greater chance) that the global average net effect of human activities has been the dominant cause of warming since the mid-twentieth century (IPCC 2014).

Gases that absorb and re-emit infrared radiation in the atmosphere are called GHGs. The gases widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere and natural processes, such as oceanic evaporation, largely determine its atmospheric concentrations.

GHGs are emitted by natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are usually by-products of fossil fuel combustion, and CH_4 results from off-gassing associated with agricultural practices and landfills. Human-made GHGs, many of which have greater heat-absorption potential than CO_2, include fluorinated gases and SF_6 (United States Environmental Protection Agency [U.S. EPA] 2020). Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO_2e), and is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 28, meaning its global warming effect is 28 times greater than carbon dioxide on a molecule per molecule basis (IPCC 2015).

The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without the natural heat-trapping effect of GHGs, the earth's surface would be about 34 degrees Celsius (°C) cooler (California Environmental Protection Agency 2006). However, emissions from human

activities, particularly the consumption of fossil fuels for electricity production and transportation, are believed to have elevated the concentration of these gases in the atmosphere beyond the level of concentrations that occur naturally.

b. Greenhouse Gas Emissions Inventory

Global Emissions Inventory

Worldwide anthropogenic emissions of GHGs were approximately 46,000 million metric tons (MMT or gigatonne) of CO_2e in 2010 (IPCC 2014). Carbon dioxide emissions from fossil fuel combustion and industrial processes contributed about 65 percent of total emissions in 2010. Of anthropogenic GHGs, carbon dioxide was the most abundant, accounting for 76 percent of total 2010 emissions. Methane emissions accounted for 16 percent of the 2010 total, while nitrous oxide and fluorinated gases accounted for 6 percent and 2 percent respectively (IPCC 2014).

Federal Emissions Inventory

Total United States (U.S.) GHG emissions were 6,676.6 MMT of CO_2e in 2018. Since 1990, total U.S. emissions have increased by an average annual rate of 0.13 percent for a total increase of 3.7 percent since 1990. Emissions increased by 2.9 percent from 2017 to 2018. The increase from 2017 to 2018 was primarily the result of increased fossil fuel combustion due to several factors, including increased energy use from greater heating and cooling needs due to a colder winter and hotter summer in 2018 as compared to 2017. In 2018, the industrial and transportation end-use sectors accounted for 29 percent and 28 percent, respectively, of GHG emissions while the residential and commercial end-use sectors each accounted for 16 percent of GHG emissions with electricity emissions distributed among the various sectors (U.S. EPA 2020).

California Emissions Inventory

Based on the California Air Resource Board's (CARB) California Greenhouse Gas Inventory for 2000-2017, California produced 424.1 MMT of CO_2e in 2017. The major source of GHG emissions in California is transportation, contributing 41 percent of the state's total GHG emissions. The industrial sector is the second largest source, contributing 24 percent of the state's GHG emissions, while electric power accounts for approximately 15 percent (CARB 2019). California emissions are due in part to its large size and large population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions, as compared to other states, is its relatively mild climate. In 2016, the State of California achieved its 2020 GHG emission reduction target as emissions fell below 431 MMT of CO_2e (CARB 2019). The annual 2030 statewide target emissions level is 260 MMT of CO_2e (CARB 2017).

c. Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources though potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Each of the past three decades has been warmer than all the previous decades in the instrumental record, and the five warmest years in the 1880-2019 record have all occurred since 2015 with nine of the 10 warmest years occurring since 2005. The observed global mean surface temperature in 2019 was approximately 0.95°C (1.71 degrees Fahrenheit) higher than the average global mean surface

temperature over the period from 1880 to 2019 (National Oceanic and Atmospheric Administration 2019). Furthermore, several independently analyzed data records of global and regional Land-Surface Air Temperature obtained from station observations jointly indicate that Land-Surface Air Temperature and sea surface temperatures have increased. Due to past and current activities, anthropogenic GHG emissions are increasing global mean surface temperature at a rate of 0.2°C per decade. In addition to these findings, there are identifiable signs that global warming is currently taking place, including substantial ice loss in the Arctic over the past two decades (IPCC 2014 and 2018).

According to *California's Fourth Climate Change Assessment*, statewide temperatures from 1986 to 2016 were approximately 0.6 to 1.1°C higher than those recorded from 1901 to 1960. Potential impacts of climate change in California may include reduced water supply from snowpack, sea level rise, more extreme heat days per year, more large forest fires, and more drought years (State of California 2018). While there is growing scientific consensus about the possible effects of climate change at a global and statewide level, current scientific modeling tools are unable to predict what local impacts may occur with a similar degree of accuracy. In addition to statewide projections, *California's Fourth Climate Change Assessment* includes regional reports that summarize climate impacts and adaptation solutions for nine regions of the state and regionally-specific climate change case studies (State of California 2018). A summary follows of some of the potential effects that could be experienced in California as a result of climate change.

Air Quality

In Monterey County, annual average maximum temperatures are predicted to rise from a historical average of 70°F to 72°F by 2040 and 78°F by 2100 (State of California 2018). Higher temperatures are conducive to air pollution formation and could worsen air quality in California as they rise. Climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. As temperatures have increased in recent years, the area burned by wildfires throughout the state has increased, and wildfires have occurred at higher elevations in the Sierra Nevada Mountains (State of California 2018). If higher temperatures continue to be accompanied by an increase in the incidence and extent of large wildfires, air quality would worsen, but if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution. This would effectively reduce the number of large wildfires, thereby ameliorating the pollution associated with them. In past years, fire sizes along the Central Coast have increased in conjunction with higher air temperatures in the month of ignition and low annual precipitation levels (State of California 2018). Increased wildfire incidence and severity would pose a substantial threat to the population of Monterey county, 14 percent of which lives in areas designated as high or very high risk in the California Department of Forestry and Fire Protection's Fire Hazard Severity Zone maps (State of California 2018). Severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state (California Natural Resources Agency 2009). Vulnerable populations in Monterey county, such as agricultural field workers, are especially at risk of experiencing adverse health impacts from severe heat conditions due to prolonged outdoor exposure (State of California 2018).

Water Supply

Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west,

including a pattern of recurring and extended droughts. Uncertainty remains with respect to the overall impact of climate change on future precipitation trends and water supplies in California. Year-to-year variability in statewide precipitation levels has increased since 1980, meaning that wet and dry precipitation extremes have become more common (California Department of Water Resources 2018). This uncertainty regarding future precipitation trends complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood. The average early spring snowpack in the western U.S., including the Sierra Nevada Mountains, decreased by about 10 percent during the last century. During the same period, the sea level rose over 0.15 meter along the central and southern California coasts (State of California 2018). The Sierra snowpack provides the majority of California's water supply as snow that accumulates during wet winters is released slowly during the dry months of spring and summer. A warmer climate is predicted to reduce the fraction of precipitation that falls as snow and result in less snowfall at lower elevations, thereby reducing the total snowpack. Projections indicate that average spring snowpack in the Sierra Nevada and other mountain catchments in central and northern California will decline by approximately 66 percent from its historical average by 2050 (State of California 2018). Although the total number of days of precipitation is expected to decrease, Monterey county is forecast to experience an increase in annual precipitation levels of approximately two inches by 2040 and five inches by 2100, which means that future storms are likely to increase in intensity and/or precipitation levels in wet and dry years may become more extreme (State of California 2018).

Hydrology and Sea Level Rise

Climate change could affect the intensity and frequency of storms and flooding (State of California 2018). Furthermore, climate change could induce substantial sea level rise in the coming century. Rising sea level increases the likelihood of and risk from flooding. The rate of increase of global mean sea levels over the 2001-2010 decade, observed by satellites, ocean buoys, and land gauges, was approximately 3.2 millimeters per year, double the twentieth century trend of 1.6 millimeters per year. Global mean sea levels averaged over the last decade were about 0.20 meter higher than those of 1880 (World Meteorological Organization 2013). Sea levels along the Monterey coast have risen by approximately 1.39 millimeters per year from 1973 to 2016 (State of California 2018). Sea levels are rising faster now than in the previous two millennia, and the rise will probably accelerate, even with robust GHG emission control measures. The most recent IPCC report predicts a mean sea level rise of 0.25 to 0.94 meter by 2100 (IPCC 2018). A rise in sea levels could erode 31 to 67 percent of southern California beaches and cause flooding of approximately 370 miles of coastal highways during 100-year storm events. The city of Monterey and other low-lying coastal communities in the project area are particularly susceptible to risk of future coastal flooding due to low base elevations. Rising sea levels would also jeopardize California’s water supply due to seawater intrusion and induce groundwater flooding and/or exposure of buried infrastructure (State of California 2018). Cliffs have retreated across the Central Coast an average of 0.3 meter per year between the 1920s/1930 and 1988/2002 with the greatest retreat experienced south of the project area at Pfeiffer Beach in Big Sur (State of California 2018). In addition, the potential for climate change to exacerbate seawater intrusion is of particular concern in the project area given that it is an ongoing problem in the Salinas Valley Groundwater Basin, which underlies a portion of the project area (California Department of Water Resources 2004; State of California 2018). The upper aquifers in the Salinas Valley Groundwater Basin (180-foot aquifer and 400-foot aquifer which is north of the

Monterey Subbasin) along the coast are experiencing high salinity due to seawater intrusion.[1] Increased storm intensity and frequency could affect the ability of flood control facilities, including levees, to handle storm events.

Agriculture

California has a $50 billion annual agricultural industry that produces over a third of the country's vegetables and two-thirds of the country's fruits and nuts. Monterey County is the leading county in agricultural production in the Central Coast region with an approximately $4.4 billion agricultural industry (California Department of Food and Agriculture 2019; State of California 2018). Higher CO_2 levels can stimulate plant production and increase plant water-use efficiency, but if temperatures rise and drier conditions prevail, certain regions of agricultural production could experience water shortages of up to 16 percent. Rising temperatures would also increase water demand as hotter conditions lead to the loss of soil moisture; crop yield could be threatened by water-induced stress and extreme heat waves; and plants may be susceptible to new and changing pest and disease outbreaks (State of California 2018). Temperature increases could change the time of year certain crops, such as wine grapes, bloom or ripen and thereby affect their quality (California Climate Change Center 2006).

Ecosystems and Wildlife

Climate change and the potential resulting changes in weather patterns could have ecological effects on the global and local scales. Increasing concentrations of GHGs are likely to accelerate the rate of climate change. Scientists project that the annual average maximum daily temperatures in California could rise by 2.4 to 3.2°C in the next 50 years and by 3.1 to 4.9°C in the next century (State of California 2018). Soil moisture is likely to decline in many regions, and intense rainstorms are likely to become more frequent. Rising temperatures could have four major impacts on plants and animals: timing of ecological events; geographic distribution and range of species; species composition and the incidence of nonnative species within communities; and ecosystem processes, such as carbon cycling and storage (Parmesan 2006; State of California 2018).

4.2.2 Regulatory Setting

a. Federal Regulations

Federal Clean Air Act

The U.S. Supreme Court determined in *Massachusetts et al. v. Environmental Protection Agency et al.* ([2007] 549 U.S. 05-1120) that the U.S. EPA has the authority to regulate motor vehicle GHG emissions under the federal Clean Air Act. The U.S. EPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires annual reporting of emissions. In 2012, the U.S. EPA issued a Final Rule that established the GHG permitting thresholds that determine when Clean Air Act permits under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing industrial facilities.

[1] According to the 2019 Salinas River Long-Term Management Plan, "seawater intrusion extends approximately 7 miles inland within the 180-foot aquifer and 4 miles inland in the 400-foot Aquifer." (Monterey County Water Resources Agency and State Coastal Conservancy 2019)

In *Utility Air Regulatory Group v. Environmental Protection Agency* (134 Supreme Court 2427 [2014]), the U.S. Supreme Court held the U.S. EPA may not treat GHGs as an air pollutant for purposes of determining whether a source can be considered a major source required to obtain a PSD or Title V permit. The Court also held that PSD permits otherwise required based on emissions of other pollutants may continue to require limitations on GHG emissions based on the application of Best Available Control Technology.

Safer Affordable Fuel-Efficient Vehicles Rule

On September 27, 2019, the U.S. E.PA and the National Highway Safety Administration published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program. The Part One Rule revokes California's authority to set its own GHG emissions standards and zero-emission vehicle mandates in California. To account for the effects of the Part One Rule, CARB released off-model adjustment factors on November 20, 2019 to adjust criteria air pollutant emissions outputs from the EMFAC model.

The U.S. EPA and the National Highway Traffic Safety Administration have finalized rulemaking for Part Two of the SAFE Vehicles Rule, which would revise corporate average fuel economy and CO_2 emissions standards for model years 2021-2026 passenger cars and trucks such that the standards increase by approximately 1.5 percent each year through model year 2026 as compared to the 2012 standards which required an approximately five percent annual increase (National Highway Traffic Safety Administration 2020). On April 30, 2020, Part Two of the SAFE Vehicles Rule was published in the Federal Register (85 Federal Register 24174) and will therefore be effective on June 29, 2020. CARB had not released off-model adjustment factors for GHG emissions.

b. State Regulations

CARB is responsible for the coordination and oversight of State and local air pollution control programs in California. There are numerous regulations aimed at reducing the state's GHG emissions. These initiatives are summarized below.

California Global Warming Solutions Act of 2006 (Assembly Bill 32 and Senate Bill 32)

The "California Global Warming Solutions Act of 2006," Assembly Bill (AB) 32, outlines California's major legislative initiative for reducing GHG emissions. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHG emissions to meet the 2020 target. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 target of 431 MMT of CO_2e. On December 11, 2008, CARB approved the Climate Change Scoping Plan, which included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other sectors (CARB 2008). Many of the GHG emission reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since the plan's approval.

CARB approved the 2013 Scoping Plan Update in May 2014. The update defined CARB's climate change priorities for the next five years and set the groundwork to reach post-2020 statewide goals. The update highlighted California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the State's longer

term GHG reduction strategies with other State policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use (CARB 2014).

On September 8, 2016, the governor signed Senate Bill (SB) 32 into law, extending the California Global Warming Solutions Act of 2006 by requiring the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, and implementation of recently adopted policies and legislation, such as SB 1383 (detailed below). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with statewide per capita goals of six metric tons (MT) of CO_2e by 2030 and two MT of CO_2e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, sub-regional, or regional level), but not for specific individual projects because they include all emissions sectors in the state (CARB 2017).

Senate Bill 375

SB 375, signed in August 2008, enhances the State's ability to reach AB 32 goals by directing the CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. SB 375 aligns regional transportation planning efforts, regional GHG reduction targets, and affordable housing allocations. Metropolitan Planning Organizations (MPOs) are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the MPO's Regional Transportation Plan. Qualified projects consistent with an approved SCS or Alternative Planning Strategy (categorized as "transit priority projects") would receive incentives to streamline CEQA processing.

On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The Association of Monterey Bay Area Governments' (AMBAG) reduction target for per capita GHG emissions is a three percent per capita reduction by 2020 and a six percent per capita reduction by 2040 (AMBAG 2018b). In June 2018, AMBAG adopted the 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS). The primary goal of the 2040 MTP/SCS is to reduce GHG emissions from transportation sources to comply with SB 375, improve public health, and meet the National Ambient Air Quality Standards as set forth by the federal Clean Air Act. The key goal of the MTP/SCS is to achieve GHG emission reduction targets through integrated land use and transportation strategies. The focus of achieving these reductions is on implementing transportation and land use strategies that influence vehicle travel (AMBAG 2018).

Senate Bill 1383

Adopted in September 2016, SB 1383 requires CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. SB 1383 requires the strategy to achieve the following reduction targets by 2030:

- Methane – 40 percent below 2013 levels
- Hydrofluorocarbons – 40 percent below 2013 levels
- Anthropogenic black carbon – 50 percent below 2013 levels

SB 1383 also requires the California Department of Resources Recycling and Recovery in consultation with the CARB, to adopt regulations that achieve specified targets for reducing organic waste in landfills.

Senate Bill 100

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State's Renewables Portfolio Standard Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Executive Order B-55-18

On September 10, 2018, the Governor issued Executive Order (EO) B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets established by AB 32, SB 375, SB 32, SB 1383, and SB 100.

For more information on the Senate and Assembly bills, executive orders, and reports discussed above, and to view reports and research referenced above, please refer to the following websites: www.climatechange.ca.gov and www.arb.ca.gov/cc/cc.htm.

California Environmental Quality Act

Pursuant to the requirements of SB 97, the California Natural Resources Agency has adopted amendments to the CEQA Guidelines for determining the effects and feasible mitigation of GHG emissions. The adopted CEQA Guidelines provide general regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. To date, a variety of air districts, have adopted quantitative significance thresholds for GHGs; however, the Monterey Bay Air Resources District has not yet adopted thresholds.

Relevant Case Law

CENTER FOR BIOLOGICAL DIVERSITY V. CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE (CASE NO. 217763)

The California Supreme Court's decision in the *Center for Biological Diversity v. California Department of Fish and Wildlife* was published on November 30, 2015. This decision evaluated the methodology used to analyze GHG emissions in an Environmental Impact Report prepared for the Newhall Ranch development project that included approximately 20,885 dwelling units with 58,000 residents on 12,000 acres of undeveloped land in Los Angeles County. The Environmental Impact Report used a business-as-usual approach to evaluate whether the project would be consistent with the AB 32 Scoping Plan. The Court found there was insufficient evidence in the record of that project to explain how a project that reduces its GHG emissions by the same percentage as the business-as-usual reduction identified for the State to meet its statewide targets supported a conclusion that the project impacts were below a level of significance.

The California Supreme Court suggested regulatory consistency as a pathway to compliance by stating that a lead agency might assess consistency with the State's GHG reduction goals by

evaluating a proposed project for compliance with regulations designed to reduce GHG emissions. This approach is consistent with CEQA Guidelines Section 15064.4(b), which provides that a significance of an impact is not cumulatively considerable to the extent to which the project complies with regulations or requirements implementing a statewide, regional, or local plan to reduce or mitigate GHG emissions. The Court also found that a lead agency may rely on numerical and efficiency-based thresholds of significance for GHG emissions, if supported by substantial evidence.

GOLDEN DOOR PROPERTIES, LLC V. COUNTY OF SAN DIEGO/SIERRA CLUB, LLC V. COUNTY OF SAN DIEGO (CASE NO. 072406)

The Fourth District Court of Appeal decision in the *Golden Door Properties, LLC v. County of San Diego* case (published on September 28, 2018) evaluated the County of San Diego's 2016 Guidance Document's GHG efficiency metric, which establishes a generally applicable threshold of significance for proposed projects. The Court held that the County of San Diego is barred from using its 2016 Guidance Document's threshold of significance for GHG analysis of 4.9 MT of CO_2e per service person per year. The Court stated that the document violated CEQA because it was not adopted formally by ordinance, rule, resolution, or regulation through a public review process per CEQA Guidelines Section 15064.4(b)(3). The Court also found that the threshold was not supported by substantial evidence that adequately explained how a service population threshold derived from statewide data could constitute an appropriate GHG metric to be used for all projects in unincorporated San Diego County. Nevertheless, lead agencies may make project-specific GHG threshold determinations.

c. Local Regulations

The District has not adopted a GHG reduction plan. Of the seven local jurisdictions in the project area, only the County of Monterey and the City of Monterey have adopted GHG reduction plans. The County of Monterey has adopted the Monterey County Municipal Climate Action Plan (2013), which applies only to municipal County emissions, and the City of Monterey has adopted a Climate Action Plan (2016), which only applies to communitywide and municipal emissions generated by development within the city. Although the City of Monterey's Climate Action Plan addresses emissions associated with water usage from communitywide development, it focuses on end-user emission reduction measures (e.g., water-efficient fixtures and irrigation systems). These plans do not apply to emissions generated by District operations.

4.2.3 Impact Analysis

a. Methodology and Significance Thresholds

Methodology

This analysis considers GHG emissions associated with existing and future operation and maintenance activities of the proposed project, including emissions associated with vehicle trips along area roadways. Given that the proposed project does not include any new construction, no construction emissions would be generated, and this activity is not discussed further. This analysis focuses on emissions from operations and maintenance activities and the potential for the proposed project to produce GHG emissions beyond existing baseline conditions. GHG emissions are analyzed based on the significance thresholds contained in Appendix G of the CEQA Guidelines.

This analysis considers GHG emissions associated with operation and maintenance of the proposed project, including emissions from vehicles used to operate and maintain the water supply system. The proposed project would include the District's acquisition and subsequent operation of the Monterey Water System (MWS). The MWS would maintain its existing size and capacity, including, but not limited to, the lease of one desalination plant, 33 water wells, six water treatment facilities, 614 miles of pipe, the Monterey Pipeline and Pump Station, 74 pump stations, 108 finished water storage facilities, 3,496 fire hydrants, an estimated 12,000 distribution valves, and 117 assessor parcels with a total area of approximately 4,753 acres along with planned facilities associated with the Monterey Peninsula Water Supply Project, including the Carmel Pump Station, the 6.4 million gallon per day Desalination Plant, and associated infrastructure improvements. No new facilities are proposed under the project; however, operation and maintenance events may occur as part of the ongoing operation and maintenance of the system, similar to baseline conditions. As discussed in Section 2, *Project Description*, the District would operate the system out of the existing CalAm main office at 511 Forest Lodge Road, #100 in Pacific Grove, and therefore there would be little to no change in the length, distribution, or number of vehicle trips required to operate and maintain the MWS.

The District would offer employment to approximately 77 of the 81 existing staff CalAm staff associated with the MWS and would add approximately 10 additional positions in District administration related to billing, finance, and customer service.[2] In total, there would be approximately 87 employees hired by the District associated with the MWS, which would be a net increase of approximately six employees as compared to existing conditions (87 District employees – 81 existing CalAm employees). In addition, this analysis conservatively assumes that CalAm would hire approximately six additional employees to operate and maintain the Central Satellites (e.g., one meter reader/utility worker, two operators, and three field crew).[3] As a result, this analysis assumes the project would result in a net increase of approximately 12 employees (approximately 6 District employees + approximately 6 CalAm employees). As discussed in Section 4.5, *Transportation*, the net increase of approximately 12 employees would result in net increases of approximately 6,240 annual trips and approximately 156,000 annual VMT. The proposed project does not include acquisition of the Central Satellites, which are small stand-alone water systems throughout Monterey County that consist of the Ambler Park, Chualar, Garrapata, Ralph Lane, and Toro systems. CalAm would retain ownership of these facilities and would continue to perform operations and maintenance activities related to these facilities. Vehicle trips associated with the Central Satellites would be required for water quality sampling, inspections, repairs of leaks and breaks, backflow testing, dead-end flushing, meeting vendors for valve exercising or tank inspections, and meter reading, among other activities. As discussed in Section 4.5, *Transportation*, the project would result in net increases of approximately 1,800 maximum annual trips (772 trips for Ambler Park + 92 trips for Chualar + 84 trips for Garrapata + 84 trips for Ralph Lane + 768 trips for Toro) and approximately 21,180 maximum annual vehicle miles traveled (VMT).[4] In total, the

[2] It is possible that some of the 77 existing CalAm employees who are offered employment by the District would instead pursue employment opportunities at CalAm or another employer or retire. In these events, the District would hire other employees to fill the open positions. Given the nature of these employment opportunities, it is likely that non-CalAm employees that would be hired by the District currently live in the Monterey Peninsula area. Regardless, the key metric for this analysis is the number of net new employees hired by the District after acquisition of the MWS, which would be six.

[3] Although this scenario is possible, it is also possible that CalAm would utilize existing employees to operate and maintain the Central Satellites rather than hiring additional employees. As such, this is a conservative assumption for the purposes of analysis.

[4] As further detailed in Section 4.5, *Transportation*, maximum annual trip estimates conservatively assume that all trips for each operations and maintenance activity would occur in the same year. In reality, some activities would not occur during the same year. For example, Toro system tank inspections that occur every five years may occur during a different year than Ambler Park tank inspections that occur every five years.

project would result in net increases of approximately 7,008 annual trips (6,240 trips for employee commutes + 768 trips for Central Satellites) and 177,180 annual VMT (156,000 VMT for employee commutes and 21,180 VMT for Central Satellites). These vehicle trips would emit GHGs during start-up and while in motion.

GHG emissions associated with the net change in vehicle trips and VMT under the proposed project were estimated using vehicle emissions factors (EFs) for the Monterey County region for year 2020 as reported by CARB's EMFAC2017 Web Database v1.0.2 tool for EMFAC2011 vehicle categories (CARB 2020). It was assumed that all net new vehicle trips would be gasoline-fueled light-duty trucks (gross vehicle weight rating of less than 6,000 pounds and equivalent test weight less than or equal to 3,750 pounds; LDT1).[5] Additional model inputs include aggregated model years and aggregated speeds. This analysis uses EFs for year 2020, which is a conservative assumption given that the proposed acquisition would occur in a later year at which time vehicle fuel efficiency will have improved in accordance with federal and state regulatory standards, which will correspondingly decrease GHG emissions. No adjustments to the EFs are needed to account for the SAFE Rule Part Two because this rule only impacts fuel economy and emissions standards for year 2021 and later, not those for year 2020 (National Highway Traffic Safety Administration 2020). The full output from the EMFAC2017 Web Database can be found in Appendix B.

Significance Thresholds

Based on Appendix G of the CEQA Guidelines, impacts related to GHG emissions from the project would be significant if the project would:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases

The vast majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]).

The analysis for Threshold 1 is consistent with CEQA Guidelines Section 15064.4(b)(1) and compares GHG emissions from the proposed project to baseline GHG emissions. According to CARB's 2017 Scoping Plan, "absent conformity with an adequate geographically-specific GHG reduction plan…achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development" (CARB 2017).[6] Therefore, the

[5] Although this scenario is possible, it is likely that some vehicle trips would be made using light-duty automobiles (LDA), which emit fewer GHGs than light-duty trucks. However, the assumption that all vehicle trips would be made using LDT1 vehicles provides a more conservative estimate of mobile source emissions and is therefore used herein.

[6] It should be noted that the 2017 Scoping Plan also states, "Achieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA" (CARB 2017).

District has determined that, for this proposed project, any increase in GHG emissions above baseline conditions would be significant.

The analysis for Threshold 2 qualitatively analyzes the proposed project's consistency with applicable goals, plans, policies, and regulations adopted for the purpose of reducing GHG emissions. A project is considered consistent with the provisions of these documents if it meets the general intent in reducing emissions to facilitate the achievement of local, regional, and State goals and does not impede attainment of those goals. A given project need not be in perfect conformity with each and every planning policy or goals to be consistent. A project would be consistent with applicable plans, policies, and regulations if it would further their objectives and not obstruct their attainment.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Impact GHG-1 THE PROPOSED PROJECT WOULD GENERATE GHG EMISSIONS THAT MAY HAVE A SIGNIFICANT IMPACT ON THE ENVIRONMENT, AND IMPLEMENTATION OF MITIGATION MEASURE GHG-1 WOULD BE REQUIRED. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

As discussed under Section 4.2.3(a), *Methodology and Significance Thresholds*, this analysis assumes there would be little to no change in the length, distribution, or number of vehicle trips required to operate and maintain the MWS after its acquisition. Therefore, this analysis focuses on emissions generated by the net change in vehicle trips and VMT due to the net increase of approximately 12 employees hired by the District and CalAm as well as CalAm's operation and maintenance of the Central Satellites separately from the MWS following the District's acquisition. Vehicle trips associated with the net increase in employees would be required for home-work commute trips, and vehicle trips associated with the Central Satellites would be required for water quality sampling, inspections, repairs of leaks and breaks, backflow testing, dead-end flushing, meeting vendors for valve exercising or tank inspections, and meter reading, among other activities.

Table 4.2-1 summarizes GHG emissions generated by the potential net increases in annual vehicle trips and VMT under the proposed project. As shown therein, the proposed project would potentially result in a net increase of approximately 62.7 MT of CO_2e per year. As discussed in Section 4.2.3(a), *Methodology and Significance Thresholds*, this analysis considers any increase in GHG emissions above baseline conditions to be cumulatively considerable. Therefore, because the proposed project would potentially result in an increase in GHG emissions of approximately 62.7 MT of CO_2e per year, impacts would be significant and cumulatively considerable.

Table 4.2-1 Combined Annual GHG Emissions

Source	Project Emissions (MT of CO_2e per year)
Project Emissions	62.7

MT = metric tons; CO2e = carbon dioxide equivalents

See Appendix B for emission calculations.

Following the District's acquisition of the MWS under the proposed project, it is likely that the CalAm executive team and staff based out of San Diego and New Jersey would need to travel less often to the project area, Sacramento, and San Francisco for conferences, hearings, settlement meetings, and rate cases.[7] In addition, it is likely that some travel by various stakeholders (e.g., California Public Utilities Commission, other public agencies) and members of the public between San Francisco/Sacramento and the project area for hearings and other meetings would also be reduced. The potential reduction in travel associated with the MWS would result in reduced GHG emissions, which would offset some of the GHG emissions associated with the proposed project. However, specific information on the change in travel by the CalAm executive team and staff, various stakeholders, and members of the public is not available at this time, and there are multiple variables (e.g., shifting patterns of teleworking and regional and airline travel due to COVID-19) that may also affect future travel patterns. Therefore, this analysis conservatively does not quantify or take credit for this emission reduction.

Mitigation Measure

GHG-1 Greenhouse Gas Reduction Plan for Operational Emissions

The District shall prepare and implement a Greenhouse Gas Reduction Program (GGRP) that reduces the net increase in GHG emissions of 62.7 MT of CO_2e to net zero (i.e., carbon neutral) over the operational life of the proposed project. To meet the net zero requirement, the District must reduce its operational GHG emissions by 16.8 MT of CO_2e per year. Potential options include, but would not be limited to, those listed in Table 4.2-2.

Table 4.2-2 Summary of GHG Mitigation Options

Source Category	Mitigation Measure
Mobile Sources	
	Convert some or all the District's existing and/or proposed vehicle fleet to be powered by alternative low-carbon fuels, electricity, fuel cells, and/or other technologies.
	Install electric vehicle chargers and/or other alternative fueling stations at existing and/or proposed District facilities.
	Require all employees with driving duties to participate in a mandatory training program that provides information on ways to improve fuel economy, such as slow acceleration, removing unnecessary loads from vehicles, limiting idling, reducing air conditioning use, using cruise control, and carpooling with colleagues. Implement a transportation demand management program for employees, which may include the following measures: ▪ Priority parking for carpools, vanpools, and alternatively fueled vehicles ▪ Subsidized transit passes for employees ▪ Retention of a transportation demand management coordinator or creation of a website to provide transit information and/or coordinate ridesharing ▪ Additional bicycle parking and/or shower and changing facilities ▪ Bicycle sharing ▪ Emergency ride home program ▪ Telecommuting or flexible schedule options to reduce transit time, vehicle miles traveled, and GHG emissions

[7] It is possible that CalAm will re-locate its main California office to Sacramento in 2024; however, this EIR analyzes project impacts as compared to existing baseline conditions at the time of publication of the NOP (April 2020). As of April 2020, the CalAm headquarters remains in San Diego. Regardless, this analysis does not quantify or take credit for these potential trip reductions; as such, the location of the CalAm headquarters does not influence the analysis presented herein.

Source Category	Mitigation Measure
Energy	
	Replace existing and/or proposed District facilities with more energy-efficient equipment.
	Replace diesel-, natural gas- and propane-fueled equipment with electric equivalents at existing and/or proposed District facilities
	Convert interior and exterior lighting at existing and/or proposed District facilities to high-efficacy luminaires, including light emitting diodes (LED)
	Utilize automated lighting controls for indoor/outdoor lighting at existing and/or proposed District facilities
	Switch to renewable gas (biogas) for facilities and equipment that cannot be replaced by electric equipment
	Schedule times of high pumping to coincide with times of high renewable energy availability and low demand
Waste[1]	
	Implement a program to separate organic waste from other materials and contract with local waste disposal companies to route organic waste to food recovery centers, anaerobic digestion, or composting facilities
	Develop and implement net zero waste programs at District facilities
Water[1]	
	Expand targeted outreach programs to install water efficient landscapes, irrigation systems, appliances, and fixtures through the use of a rebate program
Vegetation Change	
	Plant trees in the District's service area
Carbon Offsets	
	Directly undertake or fund activities that reduce or sequester GHG emissions ("Direct Reduction Activities") and retire the associated "GHG Mitigation Reduction Credits." A "GHG Mitigation Reduction Credit" shall mean an instrument issued by an Approved Registry and shall represent the estimated reduction or sequestration of 1 MT of CO_2e that shall be achieved by a Direct Reduction Activity that is not otherwise required (CEQA Guidelines Section 15126.4[c][3]). A "GHG Mitigation Reduction Credit" must achieve GHG emission reductions that are real, permanent, quantifiable, verifiable, enforceable, and in addition to any GHG emission reduction required by law or regulation or any other GHG emission reduction that otherwise would occur in accordance with the criteria set forth in the California Air Resources Board's most recent *Process for the Review and Approval of Compliance Offset Protocols in Support of the Cap-and-Trade Regulation* (2013). An "Approved Registry" is an accredited carbon registry that follows approved California Air Resources Board Compliance Offset Protocols. At this time, Approved Registries include American Carbon Registry, Climate Action Reserve, and Verra (California Air Resources Board 2018). Credits from other sources will not be allowed unless they are shown to be validated by protocols and methods equivalent to or more stringent than the California Air Resources Board standards. In the event that a project or program providing GHG Mitigation Reduction Credits to the District loses its accreditation, the District shall comply with the rules and procedures of retiring GHG Mitigation Reduction Credits specific to the registry involved and shall undertake additional direct investments to recoup the loss.

Source Category	Mitigation Measure
	Obtain and retire "Carbon Offsets." "Carbon Offset" shall mean an instrument issued by an Approved Registry and shall represent the past reduction or sequestration of 1 MT of CO_2e achieved by a Direct Reduction Activity or any other GHG emission reduction project or activity that is not otherwise required (CEQA Guidelines Section 15126.4[c][3]). A "Carbon Offset" must achieve GHG emission reductions that are real, permanent, quantifiable, verifiable, enforceable, and in addition to any GHG emission reduction required by law or regulation or any other GHG emission reduction that otherwise would occur in accordance with the criteria set forth in the California Air Resources Board's most recent *Process for the Review and Approval of Compliance Offset Protocols in Support of the Cap-and-Trade Regulation* (2013). If the District chooses to meet some of the GHG reduction requirements by purchasing offsets on an annual and permanent basis, the offsets shall be purchased according to the District's preference, which is, in order of District preference: (1) within the project area; (2) within the MBARD jurisdictional area; (3) within the State of California; then (4) elsewhere in the United States. In the event that a project or program providing offsets to the District loses its accreditation, the District shall comply with the rules and procedures of retiring offsets specific to the registry involved and shall purchase an equivalent number of credits to recoup the loss.

[1] Although the proposed project would not result in net increases in GHG emissions related to energy use, waste generation, or water use as compared to the existing baseline, GHG emission reduction measures can be implemented in these areas to effectively offset the project's mobile source emissions.

Significance After Mitigation

To implement Mitigation Measure GHG-1, the District may choose to apply a wide variety of GHG emission reduction measures to reduce net new project-related emissions to 0 MT of CO_2e per year. For example, the following combination of measures would reduce GHG emissions by approximately 62.7 MT of CO_2e per year, which would be sufficient to achieve the requisite reduction specified by Mitigation Measure GHG-1 (see Appendix B for supporting calculations):

- Allowing 15 District employees to telework two days per week would achieve a reduction of approximately 10.2 MT of CO_2e per year (approximately 0.3 MT of CO_2e per year per employee per telework day per week)
- Converting three District fleet vehicles to electric vehicles would achieve a reduction of approximately 35.8 MT of CO_2e per year (approximately 11.9 MT of CO_2e per year per vehicle)
- Subsidizing transit passes for six employees who then commute to work via transit three days per week would achieve a reduction of approximately 6.1 MT of CO_2e per year (approximately 0.7 MT of CO_2e per year per employee per transit use day per week)
- Planting 32 boxelder trees (*Acer negundo*) sized at 1.0 inch diameter at breast height at the time of planting in an area with partial sunlight would sequester approximately 2.6 MT of CO_2e per year (0.08 MT of CO_2e per year per tree)
- Obtaining and retiring 8 Carbon Offsets would achieve a reduction of 8.0 MT of CO_2e per year (1.0 MT of CO_2e per year per offset)

The above combination of measures is just one example of the combination of measures the District could implement to achieve a reduction of 62.7 MT of CO_2e per year. In this example, only approximately 13 percent would be associated with Carbon Offsets. In practice, the District may elect to implement other measures or the above measures in different quantities (e.g., allow more telework days per week or convert more fleet vehicles); Carbon Offsets may be reduced or even eliminated, depending on the final combination of measures selected. The intent of the above list is

to demonstrate that implementation of Mitigation Measure GHG-1 is technically feasible, and as such, a reduction of project-related GHG emissions to 0 MT of CO_2e per year is achievable.

Therefore, implementation of Mitigation Measure GHG-1 would reduce net new project-related emissions to 0 MT of CO_2e per year, which would result in no net increase in GHG emissions as compared to baseline conditions. Impacts would be less than significant with mitigation incorporated.

Threshold 2:	Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact GHG-2 THE PROPOSED PROJECT WOULD BE CONSISTENT WITH PLANS, POLICIES, OR REGULATIONS ADOPTED FOR THE PURPOSE OF REDUCING GHG EMISSIONS, AND IMPLEMENTATION OF MITIGATION MEASURE GHG-1 WOULD BE REQUIRED. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

As discussed in Section 4.2.2(c), *Local Regulations*, the District has not adopted a GHG reduction plan, and the climate action plans adopted by the County of Monterey and the City of Monterey do not apply to the District. Therefore, there is no local GHG reduction plan that would apply to the proposed project.

The goals and policies of the AMBAG 2040 MTP/SCS focus on accommodating new households and jobs, investing in the existing and planned regional transportation network, providing new facilities for alternative transportation use, and implementing Complete Streets policies. The project would not be inconsistent with the goals of the AMBAG 2040 MTP/SCS, which is aimed at reducing vehicle trips, VMT, and associated GHG emissions from typical land use development projects such as residential and commercial development rather than from water infrastructure projects such as the proposed project.

The 2017 Scoping Plan outlines a pathway to achieving the reduction targets set under SB 32, which is considered an interim target toward meeting the State's long-term 2045 goal established by EO B-55-18. Based on existing emissions trends, proposed project emissions are expected to decline from 2020 through at least 2045 due to continued regulatory and technological advancements. The extent to which future GHG emissions from mobile sources attributed to the proposed project would change depends primarily on the fuel type and carbon content of fuel that will be available and required to meet both regulatory standards and employees' needs. In addition, vehicle emissions standards will decrease GHG emissions per unit of energy delivered or per VMT.

Statewide efforts are underway to facilitate the State's achievement of the 2017 Scoping Plan and EO B-55-18 targets, and it is reasonable to expect project emissions to decline as the regulatory initiatives identified by CARB in the 2017 Scoping Plan are implemented and other technological innovations occur. Given the reasonably anticipated decline in project emissions through 2045, the proposed project would not conflict with the 2017 Scoping Plan's 2030 goal and EO B-55-18's 2045 goal. Therefore, impacts would be significant.

Mitigation Measure

See Mitigation Measure GHG-1 under Impact GHG-1.

Significance After Mitigation

Implementation of Mitigation Measure GHG-1 would reduce net new project-related emissions to 0 MT of CO_2e per year, which would result in no net increase in GHG emissions as compared to baseline conditions. Therefore, with mitigation incorporated, the project would be consistent with the 2017 Scoping Plan, and impacts would be less than significant.

c. Cumulative Impacts

The geographic scope for related projects considered in the cumulative impact analysis for GHG emissions is global because impacts of climate change are experienced on a global scale regardless of the location of GHG emission sources. Therefore, GHG emissions and climate change are, by definition, cumulative impacts. As discussed under Section 4.2.1(c), *Potential Effects of Climate Change*, the adverse environmental impacts of cumulative GHG emissions, including sea level rise, increased average temperatures, more drought years, and more large forest fires, are already occurring. As a result, cumulative impacts related to GHG emissions are significant. Thus, the issue of climate change involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. Refer to Impacts GHG-1 and GHG-2 for detailed discussions of the impacts of the proposed project related to climate change and GHG emissions. As discussed therein, with implementation of Mitigation Measure GHG-1, project impacts would be less than significant and would therefore not be cumulatively considerable.

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4.3 Hydrology and Water Quality

This section analyzes the proposed project's potential to substantially deplete groundwater supplies or interfere substantially with groundwater recharge. As discussed below in Section 4.3.3, *Impact Analysis*, the Appendix G Initial Study checklist also includes questions that are not applicable to the proposed project; therefore, checklist items 1, 3, 4 and 5 are analyzed in Section 4.7, *Effects Found to be Less than Significant.*

4.3.1 Setting

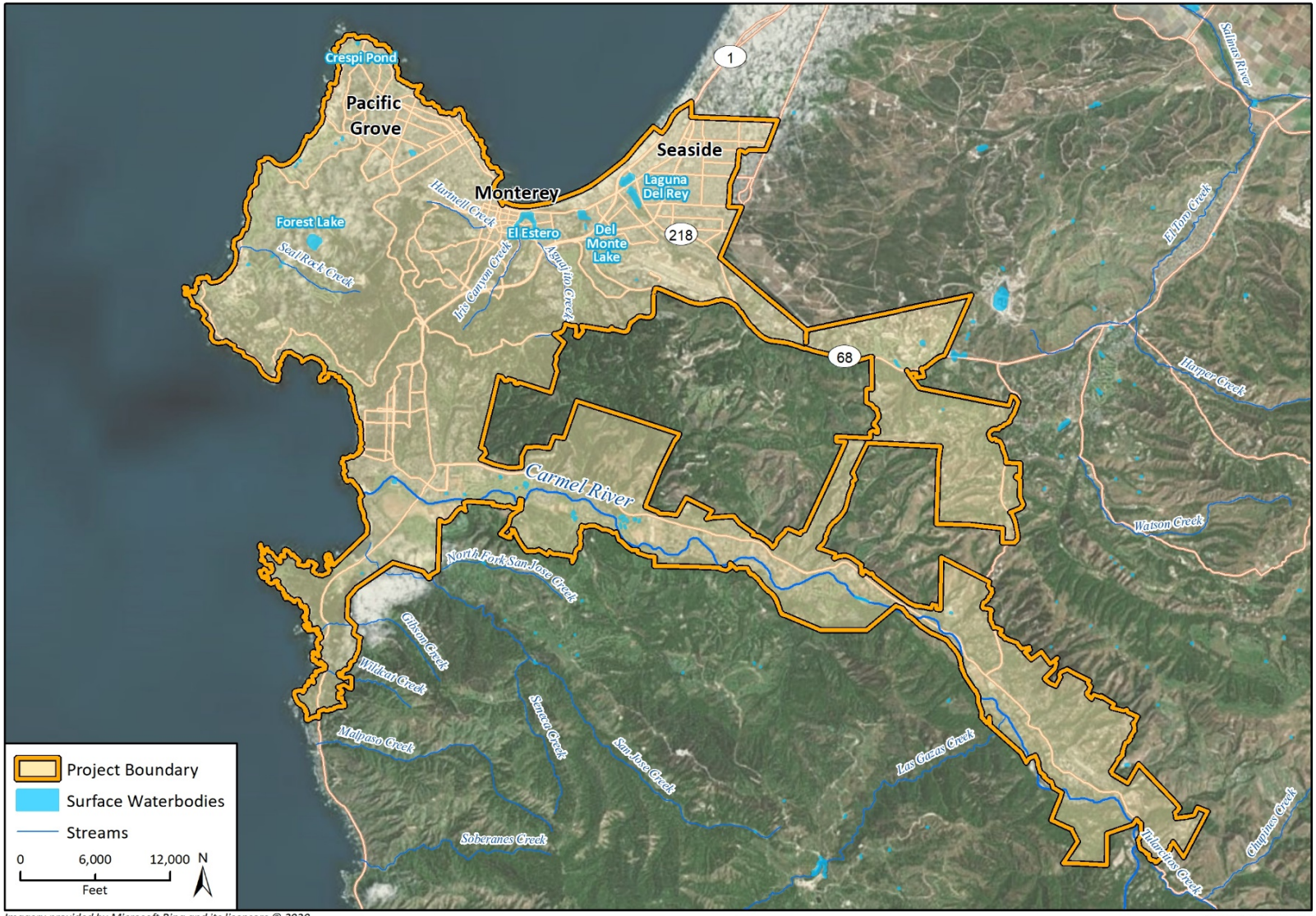
a. Regional Hydrologic Setting

The project area lies within the Coast Range Geomorphic Province. This province is characterized by parallel northwest trending mountain ranges formed over the past 10 million years or less by active uplift related to complex tectonics of the San Andreas fault/plate boundary system (California Geological Survey 2002).

The Department of Water Resources (DWR) divides surface watersheds in California into ten Hydrologic Regions (HR). The project area is located in the Central Coast HR. This region covers approximately 7.22 million acres and includes all of Santa Cruz, Monterey, San Luis Obispo, and Santa Barbara counties, and parts of San Benito, San Mateo, Santa Clara, and Ventura counties. Major geographic features that define the region include the Pajaro, Salinas, Carmel, Santa Maria, Santa Ynez, and Cuyama valleys; the coastal plain of Santa Barbara; and the Coast Range. The region is largely defined by the northwest-trending southern Coast Range, with a climate generally classified as Mediterranean. Major drainages in the Central Coast HR include the Salinas, Cuyama, Santa Ynez, Santa Maria, San Antonio, San Lorenzo, San Benito, Pajaro, Nacimiento, Carmel, and Big Sur rivers (DWR 2004). The region depends heavily on groundwater, which makes up the vast majority of available water supply, but recycled water is becoming a more plentiful, supplemental source for agricultural and other non-potable uses (DWR 2009). The Central Coast Regional Water Quality Control Board (RWQCB) governs basin planning and water quality in the Central Coast HR (Central Coast RWQCB 2016).

DWR subdivides HRs into Hydrologic Units (HU) that are commonly known as watersheds. In the Central Coast HR, the project area is located in several HUs, including: the Salinas HU, specifically the Monterey Bay Hydrologic Area (HA) and Arroyo Seco HA, the Carmel River HU and the Santa Lucia HU (Central Coast RWQCB 2016). The project area includes both undeveloped open space with natural drainage features and urban development with altered drainage systems, such as underground storm water systems and drainage ditches. As shown in Figure 4.3-1, according to the U.S. Geological Survey National Hydrography Dataset, blue line streams that flow within the project area include Aguajito Creek, Carmel River, Gibson Creek, Hartnell Creek, Iris Canyon Creek, Las Gazas Creek, North Fork San Jose Creek, San Jose Creek, Seal Rock Creek, Wildcat Creek. The surface water bodies in the project area include Laguna Del Rey, Del Monte Lake, Lake El Estero, Crespi Pond, and Forest Lake (U.S. Geological Survey 2018).

Figure 4.3-1 Surface Water in the Project Area



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Additional data provided by USGS, 2018.

Fig X NHD in Project Area

Carmel River

The largest watershed in the project area is the 255-square mile Carmel River Basin watershed. Its headwaters originate in the Santa Lucia Mountains to the south and is bounded by the Sierra del Salinas to the north. The river flows 36-miles northwest through the Carmel Valley, along which it combines with seven major stream tributaries and eventually discharges into Carmel Bay about five miles south of the City of Monterey (Monterey Peninsula Water Management District [District] 2014). The Carmel Valley Alluvial Aquifer lies along the downstream portion of the Carmel River and is further described below.

There is one reservoir on the Carmel River, the Los Padres Dam and Reservoir, which is located approximately 25 miles upstream of the Pacific Ocean. Constructed in 1948, the Los Padres Dam has been owned and operated by California American Water Company (CalAm) since 1965. The Los Padres Dam and Reservoir were constructed with an original storage capacity of 3,030 acre feet (AF), however due to sedimentation and siltation accumulation behind the dam the storage capacity has been reduced by 2,709 AF, in 2017 the Los Padres Dam and Reservoir had an estimated capacity of 1,679 AF (District 2019a). The historic San Clemente Dam and Reservoir, which was located 18 miles from the Pacific Ocean near the confluence of Clemente Creek, was built in 1921 and removed in 2015 because of seismic concerns and a determination by the National Marine Fisheries Service and others that removal of dams on the Carmel River would aid in the recovery of the threatened steelhead trout listed under the federal Endangered Species Act.

In 1995, the State Water Resources Control Board (SWRCB) issued Order WR 95-10, which found that CalAm was diverting more water from the Carmel River Basin than it was legally entitled to divert and stated that CalAm was legally entitled to divert 3,376 acre-feet per year (AFY) (about 3 million gallons per day [MGD]) from the Carmel River system, including both surface water diversions and subsurface flow pumped from the Carmel Valley Alluvial Aquifer. Prior to Order WR 95-10, CalAm's average annual use during non-drought years was approximately 14,106 AFY (12.6 MGD).The SWRCB ordered CalAm to implement actions to terminate its unlawful diversions from the Carmel River and to maximize use of the Seaside Groundwater Basin in order to continue serving existing connections and to reduce diversions of Carmel River water by 20 percent. In addition, a subsequent cease and desist order (CDO) (SWRCB Order Number WR 2009-0060) issued in 2009 required CalAm to cease and desist from diverting surface water beyond its legal right from the Carmel River and groundwater from the underlying Carmel Valley Alluvial Aquifer, secure a replacement water supply for service in the Monterey Peninsula by January 2017 and reduce its Carmel River diversions to 3,376 AFY no later than December 31, 2016. However, in July 2016 the SWRCB adopted Order WR 2016-0016, amending Order WR-2009-0060, and extending the date by which CalAm must terminate all unlawful diversions from the Carmel River from December 31, 2016 to December 31, 2021. This Revised CDO set an initial diversion limit of 8,310 AFY for Water Year 2015-2016 and establishes milestones for CalAm to meet in order to reach the 2021 reduced diversion targets. If CalAm fails to meet a milestone, the Revised CDO specifies that the annual diversion limit may be reduced by 1,000 AFY.

b. Groundwater Setting

The California DWR's Bulletin 118 is the State's official compendium on groundwater, and it defines the boundaries and describes the hydrologic characteristics of California's groundwater basins. The California DWR periodically updates Bulletin 118, which includes revising the basin boundaries as applicable. An interim update of Bulletin 118 occurred in 2003 and again in 2016 (DWR 2004, 2016).

As shown in Figure 4.3-2, the groundwater resources within the project area include Seaside Groundwater Basin, which is a subbasin of the Salinas Valley Groundwater Basin, and the Carmel Valley Alluvial Aquifer.

Salinas Valley Groundwater Basin

The Salinas Valley Groundwater Basin (Basin Identification #3-4), which spans an area of over 800 square miles, provides a vital source of water for municipal and agricultural users within Monterey County (Salinas Valley Basin Groundwater Sustainability Agency 2017). Situated in the middle of the San Joaquin Valley and the Pacific Ocean, the Basin is the largest coastal groundwater basin in Central California and has a storage capacity of 19,750,000 AF (Monterey County Water Resources Agency 2014). The Salinas Valley Groundwater Basin is divisible into eight area subbasins: 180/400-Foot Aquifer; Eastside Aquifer; Forebay Aquifer; Upper Valley Aquifer; Paso Robles; Seaside; Langley; and Monterey (DWR 2004).

Seaside Groundwater Basin

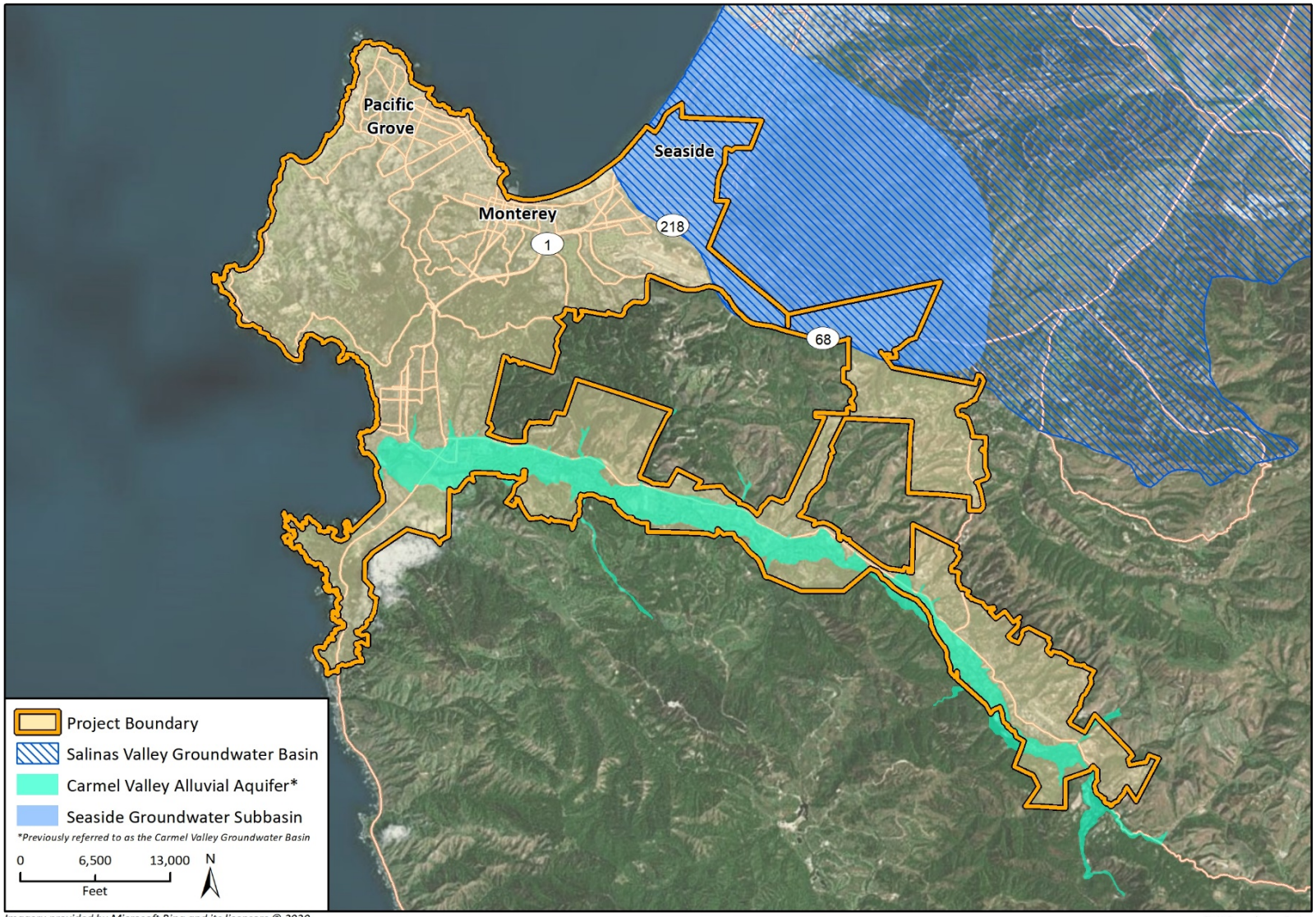
The Seaside Groundwater Basin is a subbasin of the Salinas Valley Groundwater Basin that underlies the project area and the only subbasin of the Salinas Valley Groundwater Basin that underlies the project area. The Seaside Groundwater Basin has a surface area of 40 square miles and is located underneath the cities of Sand City, Seaside and Marina, the western portion of the former Fort Ord (land formerly occupied by the Fort Ord military base), and unincorporated parts of Monterey County (DWR 2004). The Seaside Groundwater Basin is bounded on the west by the Monterey Bay, to the north and east by the Monterey Subbasin, and to the south there are no groundwater basins bordering the Basin. The Seaside Groundwater Basin consists of a sequence of three aquifers that overlie the relatively impermeable Monterey Formation. The lowermost or deepest aquifer is the Santa Margarita aquifer, the middle aquifer is the Paso Robles aquifer, and the uppermost or shallowest aquifer is the Dune Sands aquifer. The Paso Robles and Santa Margarita aquifer are the principal water-producing aquifers in the basin (District 2019b). Storage capacity has been estimated at 1,000,000 AF. The Seaside Groundwater Basin is marked as a “medium-priority” basin by DWR (DWR 2004).

In the 1970s, improved monitoring and data collection in the Seaside Groundwater Basin showed declines in the water table and overdrafting in many areas across the basin. As outlined above, in 1995, SWRCB issued Order No. WR 95-10, which found that CalAm was diverting more water from the Carmel River than it was allowed. CalAm was ordered to reduce surface water intake from the Carmel River. As a result, the utility increased coastal groundwater extraction from the Seaside Groundwater Basin to supplement its water supplies (District 2014).

CalAm filed the action which initiated adjudication of the Seaside Basin on August 14, 2003 in *California American Water v. City of Seaside et al.*, Monterey Superior Court, Case No. M66343. The utility sought a declaration of rights among parties interested in groundwater production and storage in the basin, and named a number of defendants, including local cities, developers, and landowners that historically extracted groundwater from the basin.

In 2006, the Monterey County Superior Court determined that the Seaside Groundwater Basin was in overdraft and established a physical solution to basin management by setting a "Natural Safe Yield" for the Seaside Basin of 3,000 AFY. The court found that total groundwater production in each of the preceding five years was between 5,100 and 6,100 AFY. In addition, the adjudication created a Watermaster, a court-created body with representation of the parties to the adjudication that is tasked with managing the physical solution of the basin. The Seaside Basin Watermaster consists of

Figure 4.3-2 Groundwater Resources in the Project Area



a nine-member board, representing municipal water suppliers, cities, individual pumpers, and water management agencies.

To achieve the Natural Safe Yield, pumpers were ordered to reduce pumping in steps every three years through 2021. These gradual steps were defined by the court as the operation safe yield (OSY), which is the maximum amount of groundwater that should be allowed to be produced from the basin in a given year. An initial OSY was set at 5,600 AFY; with overdraft conditions in the basin it was mandated that groundwater pumping from the basin be reduced by 2,600 AFY by 2021. The court determined each party's water right based on their historical production from the basin. Cutbacks to the OSY are to be implemented every three years until gradually the basin is brought into balance and the risk of seawater intrusion is reduced.

In general, groundwater quality in the Seaside Groundwater Basin is characterized as a sodium-chloride type in the southern end of the subbasin to a sodium-bicarbonate type in the northern portion. Water from the Santa Margarita Formation is high in hydrogen sulfide gas, however groundwater testing as part of the ASR project show that levels of hydrogen sulfide in extracted groundwater were much lower than the concentrations in natural groundwater prior to injection, indicating that ASR may reduce hydrogen sulfide in the recovered water (California Public Utilities Commission [CPUC] and Monterey Bay National Marine Sanctuary 2018). In addition, the basin could be vulnerable to seawater intrusion (DWR 2004). Seawater intrusion occurs when ocean water enters fresh groundwater aquifers at the coast and migrates inland. The salty seawater combines with the fresh groundwater to create a mixture referred to as brackish water. Seawater intrusion has occurred north of the Seaside Groundwater Basin in the 180/400 Foot Aquifer Subbasin. In addition, wells along the coast have shown elevated concentrations of chloride, although these concentrations have not exceeded drinking standards. Although seawater intrusion has not been documented in the Seaside Groundwater Basin, both of these indicators, seawater intrusion already documented in adjacent subbasins and the presence of increased chloride concentrations, indicate that seawater intrusion could be a potential issue in the Seaside Groundwater Basin moving forward (DWR 2004).

Carmel Valley Alluvial Aquifer

Although the Carmel Valley Groundwater Basin is ranked it a "high-priority" basin (Basin 3-7) by DWR (DWR 2004), it is now generally accepted that the Carmel Valley Groundwater Basin is not in fact groundwater but rather, as defined by the SWRCB and the District, surface water flowing in a known and definite channel underground (District 2016). The Carmel Valley Alluvial Aquifer underlies the alluvial portion of the Carmel River and is about six-square miles, 16 miles long, ranges in width from 300 to 4,500 feet and thickness from about 50 feet near Carmel Valley Village to 150 feet near Highway 1.

Historically, pumping of the alluvial aquifer in the spring and summer months lead to dewatering of the lower six miles of the river for several months in most years and up to nine miles in dry to extremely dry years. The aquifer is recharged relatively quickly, primarily by river infiltration, during normal rainfall years (District 2014). However as outlined above, the SWRCB issued a series of orders which limits diversions from the Carmel River Basin.

In February 2016, the District, who has already become the Groundwater Sustainability Agency (GSA) for the Carmel Valley Groundwater Basin, sent an inquiry to both DWR and the SWRCB, describing the inherent conflict in how these two agencies view and manage the Carmel Valley Alluvial Aquifer under the Sustainable Groundwater Management Act (SGMA). Specifically, the inquiry explained the Carmel River Groundwater Basin, as identified in Bulletin 118, is not

groundwater at all and should therefore be removed from the Bulletin and the requirements of SGMA. The District reasoned that the Carmel River Groundwater Basin is not subject to SGMA because the aquifer has been subject to surface water rights and is thus in the jurisdiction of the SWRCB; therefore, it does not meet SGMA's definition of "groundwater," which excludes water that flows in known and definite channels (District 2016). In response to the District, SWRCB issued a letter acknowledging both the Carmel Valley Groundwater Basin, as defined under Bulletin 118, and the Carmel River Alluvial Aquifer, and stated that due to the lack of groundwater in the Basin, the reporting requirements under SGMA do not apply to the Carmel Valley Groundwater Basin (SWRCB 2019).

4.3.2 Regulatory Setting

a. Federal and State

Section 2.3, *Regulatory Setting*, of this EIR discusses regulatory requirements and agencies relevant to the regulatory setting for the issue area of hydrology and water quality, including the following: the federal Safe Drinking Water Act, the California Urban Water Management Planning Act (which includes 2018 Water Conservation Legislation and the California Water Conservation Act of 2009), the CPUC (regulates privately operated public utilities), and the SWRCB (regulates public drinking water systems). Additional State regulations are described below.

Senate Bill 610

Statewide legislation relevant to groundwater supply management includes Senate Bill 610, which requires the preparation of a Water Supply Assessment (WSA) for certain types of projects that are subject to CEQA. However, projects that are located in basins that are already adjudicated, such as the Seaside Groundwater Basin, are exempt from requiring a WSA because implementation of an adjudication order would achieve the same goals towards water supply reliability planning as would a WSA.

Sustainable Groundwater Management Act

In 2014 a package of bills referred to as SGMA was passed to require that certain priority groundwater basins throughout the state are managed under a Groundwater Sustainability Plan (GSP) per the direction of a GSA, although adjudicated basins may comply through implementation of the applicable adjudication judgment. As a result, a GSP is not being prepared for the Seaside Groundwater Basin because it is adjudicated. Further, and as explained above in Section 4.3.1, *Existing Setting, Carmel Valley Alluvial Aquifer*, the District has been named the GSA for the Carmel Valley Groundwater Basin, however, per direction by SWRCB a GSP is not required as there is little to no groundwater in the Basin.

b. Regional

Methods available for managing groundwater resources in California include: (1) management by local agencies under authority granted in the California Water Code or other applicable State statutes, (2) local government groundwater ordinances or joint powers agreements, and (3) court

adjudications (DWR 2004). The level of groundwater management in any basin or subbasin is often dependent on water availability and demand (DWR 2004).

Seaside Groundwater Basin Adjudication

As noted previously, the Seaside Groundwater Basin was adjudicated in 2006. As part of the adjudication judgment, the Seaside Groundwater Basin Watermaster was created with the responsibility to assist the Court in enforcing the provisions of the adjudication judgment. The Seaside Groundwater Basin Watermaster is required to file an annual Watermaster Report with the Court that addresses specific Watermaster functions set forth in the adjudication decision including (Seaside Basin Watermaster 2019):

- Groundwater extraction and storage
- Amount of artificial replenishment, if any, performed by Watermaster
- Leases or sales of production allocation and administrative actions
- Use of imported, reclaimed, or desalinated water as a source of water for storage or as a water supply for lands overlying the seaside basin
- Violations of the decision and any corrective actions taken
- Watermaster administrative costs
- Replenishment assessments
- All components of the Watermaster budget
- Water quality monitoring and basin management
- A summary of basin conditions and important developments concerning the management of the Basin
- Planned near- and long-term actions of the Watermaster
- Information concerning the status of regional water supply issues
- Management activities that may bear on the Basin's wellbeing

Information provided in the annual Watermaster Report is used to ensure compliance with the adjudication, thereby ensuring that management efforts conducted in the basin are making effective progress towards achieving sustainability and water supply reliability.

Local

County of Monterey

The County of Monterey General Plan Public Services Element (2010) contains the following goal and policies that would be applicable to the proposed project:

Goal OS-3 Prevent soil erosion to conserve soils and enhance water quality

Policy OS-3.8 The County shall cooperate with appropriate regional, state and federal agencies to provide public education/outreach and technical assistance programs on erosion and sediment control, efficient water use, water conservation and re-use, and groundwater management. This cooperative effort shall be centered through the Monterey County Water Resources Agency

Policy PS-3.2 Specific criteria for proof of a Long Term Sustainable Water Supply and an Adequate Water Supply System for new development requiring a discretionary permit, including but not limited to residential or commercial subdivisions, shall be developed by ordinance with the advice of the General Manager of the Water Resources Agency and the Director of the Environmental Health Bureau. A determination of a Long Term Sustainable Water Supply shall be made upon the advice of the General Manager of the Water Resources Agency. The following factors shall be used in developing the criteria for proof of a long term sustainable water supply and an adequate water supply system:

a. Water quality;

b. Authorized production capacity of a facility operating pursuant to a permit from a regulatory agency, production capability, and any adverse effect on the economic extraction of water or other effect on wells in the immediate vicinity, including recovery rates;

c. Technical, managerial, and financial capability of the water purveyor or water system operator;

d. The source of the water supply and the nature of the right(s) to water from the source;

e. Cumulative impacts of existing and projected future demand for water from the source, and the ability to reverse trends contributing to an overdraft condition or otherwise affecting supply; and

f. Effects of additional extraction or diversion of water on the environment including on in-stream flows necessary to support riparian vegetation, wetlands, fish or other aquatic life, and the migration potential for steelhead, for the purpose of minimizing impacts on the environment and to those resources and species.

g. Completion and operation of new projects, or implementation of best practices, to renew or sustain aquifer or basin functions.

The hauling of water shall not be a factor nor a criterion for the proof of a long term sustainable water supply.

City of Seaside

The City of Seaside General Plan Conservation/Open Space Element (2003) contains the following goals and policies that would be applicable to the proposed project:

Goal COS-3 Protect and enhance local and regional ground and surface water resources

- **Policy COS-3.1** Eliminate long-term groundwater overdrafting as soon as feasible
- **Policy COS-3.2** Work with all local, regional, State, and federal agencies to implement mandated water quality programs and regulations to improve surface water quality

The City of Seaside is currently preparing *Draft Seaside 2040*, a comprehensive General Plan update, which includes updated goals and policies. The *Draft Seaside 2040* Community Facilities and Infrastructure Element (2019) contains the following goals and policies aimed at improving access to utility infrastructure:

Goal CFI-3 Clean and sustainable groundwater through policies that aim to optimize groundwater recharge from new and redevelopment projects

Goal POC-11 Pollutant discharge managed to minimize adverse impacts on water quality in the Monterey Bay, Robert's Lake, Laguna Grande and other bodies of water

City of Monterey

The City of Monterey General Plan Conservation Element (2016) contains the following goal and policies that would be applicable to the proposed project:

Goal b.1 Protect creeks, lakes, wetlands, beaches and Monterey Bay from pollutants discharged to the storm drain system

- **Policy b.2** Minimize particulate matter pollution with erosion and sediment control in waterways and on construction sites and with regular street sweeping on City streets
- **Policy b.3** Retain and restore wetlands, riparian areas, and other habitats, which provide remediation for degraded water quality

City of Del Rey Oaks

The City Del Rey Oaks General Plan Public Services and Open Space/Conservation Elements (1997) contains the following goals that would be applicable to the proposed project:

Goal 1 Provide water and maintain a water management policy that will provide a sufficient quantity of appropriate quality water to meet the needs of the existing and planned community

Goal 2 Preserve and protect the water quality, runoff, flow, and other resources of the Canyon Del Rey Drainageway

City of Sand City

The Sand City General Plan Conservation and Open Space Element (2002) includes the following goal and policy that would be applicable to the proposed project:

Goal 5.1 Maintain the quality of water resources in Sand City and prevent their contamination

- **Policy 5.1.1** The City supports efforts of the various public agencies responsible for maintaining and improving water quality in Sand City

City of Pacific Grove

The Pacific Grove General Plan Public Facilities Element (1997) contains the following goal and policy that would be applicable to the proposed project:

Goal 4 Protect Pacific Grove's water and marine resources

- **Policy 8** When reimbursement is available, cooperate with State and federal agencies in reducing impacts from urban runoff

City of Carmel-by-the-Sea

The Carmel-by-the-Sea General Plan/Local Coastal Plan Open Space and Conservation Element (2009) contains the following goal and policy that would be applicable to the proposed project:

Goal O7-6 Improve water conservation and promote water management techniques

Policy 7-21 Manage water resources to ensure equitable amounts of clean water for all users, to support wildlife habitat, and to preserve natural resources within the sustainable limits of water supplies

In addition, the various jurisdictions which encompass the project area, including the cities of Carmel-by-the-Sea, Pacific Grove, Del Rey Oaks, Monterey, Sand City, and Seaside as well as the County of Monterey, includes Ordinances that apply to water conservation towards the goals of minimizing per capita water demands and maintaining sustainable water supply to the area. These include:

- Chapters 15.12 – Water Conservation, 18.44 - Residential and Commercial Water Conservation Measures and 18.50 – Residential, Commercial and Industrial Water Conservation Measures of the Monterey County Code
- Chapters 15.28 – Water Conservation and 17.50 – Water Management Program of the Carmel-by-the-Sea Municipal Code
- Chapter 15.12 – Water Conservation of the Sand City Municipal Code
- Chapter 13.11 – Municipal Water System Water Conservation Program and 13.18 Residential and Commercial Water Conservation Measures of the City of Seaside Municipal Code

Further, a majority of the project area is within the District boundaries or is proposed for annexation into the District boundaries. The District has adopted a number of rules and regulations for water use and conservation, such as Rule 23 which requires a water permit, issued through the District, for new water use (i.e., a new connection) or an intensification of use (i.e., new fixtures or an additional bathroom). In addition, Regulation XIV – Water Conservation that sets a number of rules for water conservation rebates, water efficiency standards, and retrofits. Hence, the District's rules and regulations would be applicable to the proposed project.

4.3.3 Impact Analysis

a. Methodology and Significance Thresholds

Based on Appendix G of the *State CEQA Guidelines*, impacts to hydrology and water quality would be considered potentially significant if the proposed project would meet one of the following significance thresholds:

1. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality
2. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin
3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:
    a. result in substantial erosion or siltation on- or off-site
    b. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite

c. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
d. impede or redirect flood flows

4. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation
5. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan

As described in Section 2.5, *Project Characteristics*, the proposed project entails acquisition of CalAm's system facilities and related water rights, but would not change or expand the physical Monterey Water System (MWS) or the associated water rights, and the proposed project also would not change the manner of operation of the MWS or exercise of the associated water rights. As a result, the proposed project would result in no impact related to water quality standards or waste discharge requirements, drainage, or flooding. Therefore, checklist item 1, 3, and 4 are analyzed in Section 4.7, *Effects Found to be Less than Significant*. Checklist items 2 and 5 are discussed below.

b. Project Impacts and Mitigation Measures

Threshold 2:	Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Impact HYD-1 THE PROPOSED PROJECT WOULD NOT SUBSTANTIALLY DECREASE GROUNDWATER SUPPLIES OR INTERFERE SUBSTANTIALLY WITH GROUNDWATER RECHARGE SUCH THAT THE PROJECT MAY IMPEDE SUSTAINABLE GROUNDWATER MANAGEMENT OF THE BASIN. THEREFORE, POTENTIAL IMPACTS TO GROUNDWATER SUPPLY WOULD BE LESS THAN SIGNIFICANT.

The proposed project would not result in the construction of new infrastructure or facilities and therefore, would not introduce new impermeable areas that would have potential to affect groundwater recharge. Similarly, operation and maintenance activities that would occur under the proposed project would utilize the same access roads as current operation and maintenance activities, and road improvements that could have potential to affect groundwater recharge would not be necessary under the proposed project. Therefore, the project would not impact groundwater recharge, and the potential for the proposed project to adversely affect groundwater supplies would be limited to the potential for increased groundwater use.

The District anticipates that under its ownership water rates for customers of the MWS would be reduced in the future as compared to the rates customers would otherwise pay to CalAm. Understanding the underlying drivers between water demand and water use has been extensively studied in order to inform decision makers when planning for a sustainable water supply. Several studies have shown that water pricing can be an effective tool to incentivize water conservation (Barrett 2004; Whitcomb 2005; Ashoori et al. 2016). Ashoori et al. (2016), found in the service area of Los Angeles Department of Water and Power that price and population had the most significant impact on water demand. Barrett (2004) found higher pricing can play an important role in reductions in water consumption, especially when paired with regulation. Whitcomb's (2005) research supports the conclusion that water use decreases as price increases. Reduced water pricing could potentially result in increased water usage, as it is generally accepted that water use can fluctuate with cost. The amount of change in water use responding to changes in water cost can be

a function of several factors including but not limited to: the availability of alternate water sources, price range and elasticity, income, population, climatic data, and customer knowledge and understanding of bill information (Whitcomb 2005; Ashoori et al. 2016). Accordingly, it would be speculative to numerically predict changes in water usage based on potential future changes in water rates.

Further, the total cost of water under District ownership would include the amounts used to finance the acquisition of the MWS from CalAm, and that amount would not be known until the final purchase price for the MWS assets is determined. Regardless of the price of the MWS, while it is possible to conclude that the overall cost of water under District ownership and operation of the MWS would be less in the future, and in all likelihood substantially less, it is speculative to quantify the change in rates over time. Quantifying future rates would be speculative for the District to estimate because, as noted above, there are several variables that affect water usage in addition to price, and isolating those variables to predict how changing one variable (price) for the MWS would affect customer demand would be conjectural.

Since the analysis of water pricing is speculative, it is not required under CEQA pursuant *State CEQA Guidelines*, Section 15145 which states that, if, after thorough investigation, a lead agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact. As a result, an analysis of water demand based on water price is not required under CEQA since it is speculative. Nonetheless, out of abundance of caution and to fully address the issue consistent with *State CEQA Guidelines* Section 15145 and provide for a high degree of transparency for the decision-makers and the public, the following discussion is provided.

If water customers in the MWS area respond to changes in ownership of the system and potential rate decreases by increasing their rates of water use, the District, as the new water provider, could respond by increasing supply to accommodate increased demand, potentially increasing its use of groundwater. However, this may in turn result in increased water rates associated with the need to procure replacement water to maintain compliance with the Seaside Groundwater Basin Adjudication Decision and SWRCB Order No. WR 95-10, which could subsequently result in water uses decreasing. Alternatively, transfers of water for unused water rights from another party within the Carmel Valley Alluvial Aquifer or Seaside Groundwater Basin could be implemented to account for any excess water use.

In addition to potential changes in water demands that could occur in response to potential changes in water pricing, compliance with the Seaside Groundwater Basin Adjudication Decision and SWRCB Order WR 2016-001 and existing laws and regulations relevant to water conservation practices and goals would continue to be required. Ultimately, compliance with the SWRCB CDO that sets restrictions on pumping water from the Carmel River as well as the Seaside Groundwater Basin Adjudication Decision, which established a "Natural Safe Yield" for the Seaside Groundwater Basin of 3,000 AFY, would restrict the amount of water that may be pumped and would require the provision of replacement water to offset any water supply required in excess of what is allowed. In addition, the 2018 Water Conservation Legislation (AB 1668 and SB 606) requires urban water suppliers to stay within annual water budgets, based on set standards, for their service areas. The California Water Conservation Act of 2009 (SBX7-7) also mandates conservation goals for urban retail water suppliers, including a goal of 20 percent reduction in per capita urban consumption by 2020. Both pieces of legislation are mentioned in the Section 4.3.2, *Regulatory Setting,* above and described in Section 2.3, *Regulatory Setting*. The MWS is currently subject to the provisions of both these Acts, and the 2015 UWMP will be updated in 2020 to report the progress toward integrating management measures to reduce demand and in meeting the 20 percent reduction target outlined

in these Acts. Section 4.1, *Baseline and Targets*, of the 2015 UWMP identifies a per capita water use goal of 118 gallons per capita day (gpcd) by the year 2020, which will be achieved through using existing methods of conservation as well as additional methods identified in the 2015 UWMP (CalAm 2016). However, by 2015, the fourth year of extreme drought, average customer use was at 94 gpcd. In 2016, after the UWMP was published, the average customer use fell to 82 gpcd. Per capita use remains at such reduced levels (Crooks 2017).

The 2015 UWMP outlines seven Demand Management Measures (DMM) that CalAm implements in order to meet the 2020 urban water reduction targets. These include (CalAm 2016):

- Water waste prevention ordinances
- Metering
- Conservation pricing
- Public education and outreach
- Programs to assess and manage distribution system real loss
- Water conservation program coordination and staffing
- Other demand management measures

Regularly updated UWMPs will be required into the future, under different operational responsibility structures, and it is reasonably anticipated that future UWMPs will include comparable data and requirements as are included in the 2015 UWMP. Further, the 2015 UWMP includes detailed discussion of water storage contingency planning, including stages of action, mandatory prohibitions and restrictions, consumption reduction methods, penalties for excessive use, a three-year minimum water supply estimate, and a catastrophic supply interruption plan. For instance, as described in the 2015 UWMP, Section 6.2.2, *Stages of Action, Mandatory Prohibitions and Restrictions, Consumption Reduction Methods, Penalties for Excessive Use,* the water purveyor may impose water rationing stages and reduction measures to users within the MWS if compliance with the CDO and production limits imposed by the Seaside Watermaster are not met. Similarly, conservation measures would also be available for implementation by the District to achieve the required water use reductions, should the proposed project be approved.

Further, the District maintains its own set of rules and regulations for use and conservation, as outlined above in Section 4.3.2, *Regulatory Setting,* under District Rule 23 a water permit is required for any new connections or intensification of use. If areas outside the District are annexed as a result of the proposed project, these rules and regulations would apply to these areas, which would further regulate the use of water in these areas. In addition, annexation of areas into the District would not automatically allow vacant lots to be developed, as the District does not have land use authority. Any future development of lots in these areas, including water usage, would require CEQA clearance, permitting, and any other required approvals with the local jurisdiction, which in the case of the proposed annexation areas would be County of Monterey.

Therefore, although the District anticipates that the overall cost of water to customers of the MWS would be reduced in the future after it acquires the MWS and that the overall cost of water would continue to be less than under Cal Am's ownership,, compliance with the existing Seaside Groundwater Basin Adjudication Decision and SWRCB Order WR 2016-001and other laws and regulations would avoid significant adverse impacts to groundwater supply reliability. Impacts of the proposed project on groundwater supplies and recharge would be less than significant.

Mitigation Measures

Mitigation measures are not required.

Threshold 5:	Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact HYD-2 THE PROJECT WOULD NOT CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF A WATER QUALITY CONTROL PLAN OR SUSTAINABLE GROUNDWATER MANAGEMENT PLAN. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION.

As outlined above in Section 4.3.2, *Regulatory Setting,* a GSP is not required for the Seaside Groundwater Basin as adjudicated basins may comply through implementation of the applicable adjudication judgment. In addition, although the District has been named the GSA for the Carmel Valley Groundwater Basin, per direction by DWR the Carmel Valley Groundwater Basin boundaries are expected to be modified and a GSP will not be required since it is now highly accepted that the Carmel Valley Groundwater Basin is in fact not a basin but an alluvial aquifer. Further, the Carmel Valley Alluvial Aquifer is actively monitored and managed by the SWRCB under Order WR 2016-001. The Seaside Groundwater Basin adjudication judgment and SWRCB Order WR 2016-001have been developed to ensure the long-term sustainability of these water supply sources.

The proposed project would not involve physical construction of new facilities or infrastructure and would not involve any substantial change in physical operational or maintenance activities. Further, as discussed above under Impact HYD-1, the proposed project would not result in an increased water demand as the adjudication and SWRCB Order WR 2016-001would restrict the amount of groundwater that may be pumped, and would require the provision of replacement water to offset any water supply required in excess of what is allowed per the Adjudication Judgement. Accordingly, the proposed project would not interfere with sustainable groundwater management planning or control and the impact would be less than significant.

Mitigation Measures

Mitigation measures are not required.

c. Cumulative Impacts

The geographic scope for cumulative impacts is the MWS service area. As shown in Table 3-1, *Cumulative Projects List*, in Section 3, *Environmental Setting*, numerous development projects are anticipated within this area. Cumulative development in the MWS service include both residential and non-residential development. Cumulative development would generally increase impermeable surface in the area. These projects could affect hydrology through their construction or operation in areas such as erosion, surface water pollution, impacts to groundwater, increases in runoff, or flooding. However, continued implementation of the Seaside Groundwater Basin Adjudication Decision, SWRCB Order WR 2016-001, as well as State and local policies and regulations would ensure that future connections to the water system are appropriately planned, designed, and implemented to maintain the long-term sustainability of groundwater supplies. Further, implementation of planned projects, such as the MPWSP and/or the proposed modifications to the Pure Water Monterey Project outlined in Section 4.6, *Utilities and Service Systems,* would also ensure water supply for cumulative buildout on the Monterey Peninsula. Therefore, cumulative development would not result in a significant cumulative impact. The proposed project would not

result in the development of new facilities and as result a change in the hydrology of the project area. In addition, as discussed under Impact HWQ-1, the proposed project could theoretically increase the demand for water due to price fluctuations, most of which would be derived from groundwater sources. However, the operator of the system would be required to comply with the above cited local regulations limiting pumping of the Seaside Groundwater Basin and the Carmel River Alluvial Aquifer. As a result, water use rates would continue to decline on a per capita basis regardless of potential changes in the system operator or water rate structures. Therefore, the project itself would not contribute to future increases in water supply demand, and its contribution to cumulative impacts in relation to groundwater supplies would not be considerable.

4.4 Noise

This section evaluates the potential environmental impacts related to noise generated by implementation of the proposed project on nearby noise-sensitive land uses.

4.4.1 Setting

a. Environmental Noise

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs (e.g., the human ear). Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (California Department of Transportation [Caltrans] 2013).

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz (Hz) and less sensitive to frequencies around and below 100 Hz (Kinsler et. al. 2000). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as a doubling of traffic volume, would increase the noise level by 3 dB; similarly, dividing the energy in half would result in a decrease of 3 dB (Crocker 2007).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not "sound twice as loud" as one source. It is widely accepted that the average healthy ear can barely perceive an increase (or decrease) of up to 3 dBA in noise levels (i.e., twice [or half] the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (or half) as loud (10.5 times the sound energy) (Crocker 2007).

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in sound level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line), the path the sound will travel, site conditions, and obstructions. Noise levels from a point source (e.g., construction, industrial machinery, ventilation units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise levels from a line source (e.g., roadway, pipeline, railroad) typically attenuate at a rate of 3 dBA per doubling of distance (Caltrans 2013). The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site, such as a parking lot or smooth body of water, receives no additional ground attenuation, and the attenuation rate results simply from the geometric spreading of the source. An additional ground attenuation value of 1.5 dBA per doubling of distance applies to a soft site (e.g., soft dirt, grass, or scattered bushes and trees) (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this "shielding" depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011).

Structures can substantially reduce occupants' exposure to noise as well. The FHWA's guidelines indicate that modern building construction generally provides an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows.

The impact of noise is not a function of sound level alone. The time of day when noise occurs and the duration of the noise are also important. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. One of the most frequently-used noise metrics is the equivalent noise level (L_{eq}); it considers both duration and sound power level. L_{eq} is defined as the single steady A-weighted level equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, L_{eq} is summed over a one-hour period. L_{max} is the highest root mean squared (RMS) sound pressure level within the sampling period, and L_{min} is the lowest RMS sound pressure level within the measuring period (Crocker 2007). Normal conversational levels are in the 60 to 65 dBA L_{eq} range; ambient noise levels greater than 65 dBA L_{eq} can interrupt conversations (Federal Transit Administration [FTA] 2018).

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using Day-Night Average Level (L_{dn}), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime hours (10:00 p.m. to 7:00 a.m.). Community noise can also be measured using Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013). Noise levels described by L_{dn} and CNEL usually differ by about 1 dBA.

b. Groundborne Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of Hz. The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body is from a low of less than 1 Hz up to a high of about 200 Hz (Crocker 2007). Typically, groundborne vibration generated by human activities attenuates rapidly with distance from the source of the vibration.

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz), or when foundations or utilities, such as sewer and water pipes, physically connect the structure and the vibration source (FTA 2018). Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance away from the source. High-frequency vibrations diminish much more rapidly than low frequencies, so low frequencies tend to dominate the spectrum at large distances from the source. Discontinuities in the soil strata can also cause diffractions or channeling effects that affect the propagation of vibration over long distances (Caltrans 2020). When a building is impacted by

vibration, a ground-to-foundation coupling loss will usually reduce the overall vibration level. However, under rare circumstances, the ground-to-foundation coupling may actually amplify the vibration level due to structural resonances of the floors and walls.

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or RMS vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings (Caltrans 2020).

Although PPV is appropriate for evaluating the potential for building damage, it is not always suitable for evaluating human response. It takes some time for the human body to respond to vibration signals. In a sense, the human body responds to average vibration amplitude. The RMS of a signal is the average of the squared amplitude of the signal, typically calculated over a one-second period. As with airborne sound, the RMS velocity is often expressed in decibel notation as vibration decibels (VdB), which serves to compress the range of numbers required to describe vibration (FTA 2018).

Vibration significance ranges from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, the general threshold where minor damage can occur in fragile buildings (FTA 2018). The general human response to different levels of groundborne vibration velocity levels is described in Table 4.4-1.

Table 4.4-1 Human Response to Different Levels of Groundborne Vibration

Vibration Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception for many people
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible – many people find that transportation-related vibration at this level is unacceptable
85 VdB	Vibration acceptable only if there are an infrequent number of events per day

VdB = vibration decibels

Source: FTA 2018

c. Sensitive Receivers

Noise-sensitive land uses are generally considered to be residential uses, transient lodging, hotels, motels, hospitals, nursing homes, public assembly and entertainment venues (e.g., auditoriums, theaters, music halls, meeting halls), places of worship, schools, daycare centers, libraries, museums, parks, playgrounds, recreation and open space areas, and cemeteries. Vibration-sensitive receivers, which are similar to noise-sensitive receivers, include residences and institutional uses, such as schools, places of worship, and hospitals. However, vibration-sensitive receivers also include fragile/historic-era buildings and buildings where vibrations may interfere with vibration-sensitive equipment that is affected by vibration levels that may be well below those associated with human annoyance (e.g., recording studios or laboratory facilities with sensitive equipment).

d. Existing Noise Environment

Existing noise levels vary widely throughout the project area depending on the nature, type, and intensity of existing development. Rural and suburban residential areas generally experience lower ambient noise levels while areas in highly urbanized regions, along high-volume roadways, and near industrial development generally experience higher ambient noise levels. Quiet suburban areas

typically have noise levels in the range of 40 to 50 dBA, while those along arterial streets are in the 50 to 60+ dBA range. Noise levels along freeways are typically in the range of 65 to 80+ dBA.

The project area contains existing major noise sources, including State Route (SR) 1, SR 68 West, SR 68 East, SR 218, Carmel Valley Road, the Monterey Regional Airport, the Carmel Wastewater Treatment Plant, and the Laguna Seca Raceway (County of Monterey 2010). Additional minor noise sources throughout the project area include noise generated by traffic on other regional and local roadways; heating, ventilation, and air conditioning equipment; industrial processes; commercial activities (e.g., loading and unloading delivery trucks); construction activities; sporting events; landscaping activities; and use of sound-amplifying devices (e.g., speakers, megaphones, radios).

The project area is approximately 55 square miles with noise- and vibration-sensitive receivers located throughout and adjacent to it. Noise-sensitive receivers include residential neighborhoods, transient lodging, hotels, motels, hospitals, nursing homes, public assembly and entertainment venues, places of worship, schools (see Section 4.1, *Air Quality*, for a list of schools in the project area), daycare centers, libraries, museums, parks, playgrounds, recreation and open space areas, and cemeteries. Vibration-sensitive receivers include residential neighborhoods, schools, places of worship, historic-era buildings, recording studios, and laboratory facilities.

4.4.2 Regulatory Setting

a. State Regulations

California Government Code Section 65302 encourages each local government entity to implement a Noise Element as part of its general plan. In addition, the Office of Planning and Research has developed guidelines for preparing Noise Elements, which include recommendations for evaluating the compatibility of various land uses as a function of community noise exposure.

b. Local Regulations

Each city and county in California is required to include a Noise Element in its General Plan. Most jurisdictions have also adopted Noise Ordinances, and several have adopted noise guidelines for CEQA analysis as well. It should be noted that California Government Code Section 53091 exempts the District, as a regional public water purveyor and utility, from local zoning and building ordinances but not from codified stand-alone noise ordinances. Therefore, the following sections detail noise standards and policies from local general plans and municipal codes, excluding zoning and building ordinances, that would be applicable to the proposed project.

County of Monterey

The County of Monterey General Plan Noise Element (2010) contains the following goal that would be applicable to the proposed project:

Goal S-7 Maintain a healthy and quiet environment free from annoying and harmful sounds.

Section 10.60.030 of the Monterey County Code prohibits the operation of any noise source that produces a noise level that exceeds 85 dBA at 50 feet except for aircraft and noise sources operated at least 2,500 feet away from an occupied dwelling unit. Section 10.60.040 of the Monterey County Code establishes nighttime noise level standards, shown in Table 4.4-2, that are not to be exceeded between 9:00 p.m. and 7:00 a.m.

Table 4.4-2 County of Monterey Exterior Noise Level Standards (Nighttime Only)

	Standard
Nighttime Hourly Equivalent Sound Level (dBA L_{eq})	45
Maximum Level (dBA)	65

Source: Monterey County Code Section 10.60.040 Table 1

City of Seaside

The City of Seaside General Plan Noise Element (2003) contains the following goal and policy that would be applicable to the proposed project.

Goal N-2 Minimize transportation-related noise impacts.

Policy N-2.1 Reduce noise impacts associated with motorized vehicles, aircraft, and trains.

The City of Seaside is currently preparing *Draft Seaside 2040*, a comprehensive General Plan update, which includes updated goals, policies, and noise standards. The following goal in *Draft Seaside 2040* would be applicable to the proposed project (City of Seaside 2019):

Goal N-2 Minimal transportation-related noise impacts.

Section 9.12.040(D) of the Seaside Municipal Code exempts activities on or in publicly owned property and facilities, or by public employees or their franchisees, while in the authorized discharge of their responsibilities, from the compliance with the Noise Ordinance provided that such activities have been authorized by the owner of such property or facilities or its agent or by the employing authority.[1]

City of Monterey

The City of Monterey General Plan Noise Element (2016) contains the following goals that would be applicable to the proposed project:

Goal a Minimize traffic noise in predominantly residential areas and ensure noise in commercial areas is at an acceptable level.

Goal c Encourage quiet neighborhoods.

Section 22-18 of the Monterey City Code prohibits the creation of any noise which by reason of its raucous nature habitually disturbs the peace and quiet of any person.[2]

City of Del Rey Oaks

The City of Del Rey Oaks General Plan Noise Element (1997) contains the following goals that would be applicable to the proposed project:

Goal 1 Protect citizens from exposure to excessive levels of noise.

[1] The exterior and interior noise standards outlined in Chapter 17.30 of the Seaside Municipal Code are part of the City's zoning ordinance; therefore, the District is exempt from compliance with these noise standards per California Government Code Section 53091.
[2] The maximum noise standards outlined in Section 38-111 of the Monterey City Code are part of the City's zoning ordinance; therefore, the District is exempt from compliance with these noise standards per California Government Code Section 53091.

Goal 3 Minimize the impact of street, road and highway generated noise upon land uses in the City of Del Rey Oaks.

Section 8.20.010(C)(4) of the Del Rey Oaks City Code exempts activities on or in publicly owned property and facilities, or by public employees or their franchisees, while in the authorized discharge of their responsibilities, from compliance with the Noise Ordinance provided that such activities have been authorized by the owner of such property or facilities or its agent or by the employing authority.

City of Sand City

The Sand City General Plan (2002) includes the following goal and policy that would be applicable to the proposed project:

Goal 6.10 Minimize the exposure of Sand City residents to the harmful and undesirable effects of excessive noise.

Policy 6.10.5 Minimize motor vehicle noise impacts from streets and highways through proper route location and roadway design by employing the following strategies:

- Consider the impact of truck routes, the effects of a variety of truck traffic, and future motor vehicle volumes on noise levels adjacent to master planned roadways when improvements to the circulation system are planned.
- Mitigate traffic volumes and vehicle speed through residential neighborhoods.
- Work closely with Caltrans in the early stages of highway improvements and design modification to ensure that proper consideration is given to potential noise impacts on the city.

Section 8.040.020 of the Sand City Municipal Code prohibits the creation of unnecessary noises or sounds which are physically annoying to persons of ordinary sensitiveness or which are so harsh or prolonged or unnatural or unusual in their use, time or place as to occasion physical discomfort.

City of Pacific Grove

The Pacific Grove General Plan (1994) contains the following goal that would be applicable to the proposed project:

Goal 7 Protect Pacific Grove residents from the harmful effects of excessive noise.

Section 11.96.010 of the Pacific Grove Municipal Code prohibits the creation of any loud, unnecessary, or unusual noise which disturbs the peace or quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area.

City of Carmel-by-the-Sea

The Carmel-by-the-Sea General Plan/Local Coastal Plan Noise Element (2009) contains the following goal, objective, and policy that would be applicable to the proposed project:

G9-1 Preserve Carmel's overall quiet environment; reduce noise in Carmel to levels compatible with the existing and future land uses and prevent the increase of noise levels in areas where noise sensitive uses are located.

O9-3 Control unnecessary, excessive and annoying noises within the City where not preempted by federal or state control.

P9-12 Protect residential areas from excessive noise from traffic, especially trucks and buses.

Section 8.56.030 of the Carmel-by-the-Sea Municipal Code exempts "Class A" noise, which includes noise created by and emanating from equipment operated in the public interest, such as public utility equipment, from compliance with the Noise Ordinance.

4.4.3 Impact Analysis

a. Methodology and Significance Thresholds

Methodology

This analysis estimates noise and vibration associated with existing and future operation of the proposed project, including potential noise and vibration associated with traffic along area roadways. The existing Monterey Water System (MWS) is fully functional and would not require any additional new infrastructure to facilitate the proposed change in ownership. Therefore, the proposed project does not include any new construction and associated noise and vibration, and thus construction activity is not discussed further.

This analysis considers noise associated with the proposed project, including noise generated by operations and maintenance activities associated with the water supply system and by vehicles used by operations and maintenance staff. The proposed project would include the District's acquisition and subsequent operation of the MWS. The MWS would maintain its existing size and capacity, including, but not limited to, the lease of one desalination plant, 33 water wells, six water treatment facilities, 614 miles of pipe, the Monterey Pipeline and Pump Station, 74 pump stations, 108 finished water storage facilities, 3,496 fire hydrants, an estimated 12,000 distribution valves, and 117 assessor parcels with a total area of approximately 4,753 acres along with planned facilities associated with the Monterey Peninsula Water Supply Project, including the Carmel Pump Station, the 6.4 million gallon per day Desalination Plant, and associated infrastructure improvements. No new facilities are proposed under the project; however, operation and maintenance events would occur as part of the ongoing operation and maintenance of the system, similar to baseline conditions. As discussed in Section 2, *Project Description*, the District would operate the system out of the existing California American Water Company (CalAm) main office at 511 Forest Lodge Road, #100 in Pacific Grove, and therefore there would be little to no change in the length, distribution, or number of vehicle trips required to operate and maintain the MWS.

The District would offer employment to approximately 77 of the 81 existing staff CalAm staff associated with the MWS and would add approximately 10 additional positions in District

administration related to billing, finance, and customer service.[3] In total, there would be approximately 87 employees hired by the District associated with the MWS, which would be a net increase of approximately six employees as compared to existing conditions (87 District employees – 81 existing CalAm employees). In addition, this analysis conservatively assumes that CalAm would hire approximately six additional employees to operate and maintain the Central Satellites (e.g., one meter reader/utility worker, two operators, and three field crew).[4] As a result, this analysis assumes the project would result in a net increase of approximately 12 employees (approximately 6 District employees + approximately 6 CalAm employees). As discussed in Section 4.5, *Transportation*, the net increase of approximately 12 employees would result in net increases of approximately 24 net new daily trips. The proposed project does not include acquisition of the Central Satellites, which are small stand-alone water systems throughout Monterey County that consist of the Ambler Park, Chualar, Garrapata, Ralph Lane, and Toro systems. CalAm would retain ownership of these facilities and would continue to perform operations and maintenance activities related to these facilities. Vehicle trips associated with the Central Satellites would be required for water quality sampling, inspections, repairs of leaks and breaks, backflow testing, dead-end flushing, meeting vendors for valve exercising or tank inspections, and meter reading, among other activities. These vehicle trips would increase noise levels along roadways in the project area. [5] As discussed in Section 4.5, *Transportation*, the project would result in a net increase of approximately 38 maximum daily trips associated with operations and maintenance of the Central Satellites.[6] In total, the project would result in a net increase of approximately 62 daily trips (approximately 24 trips for employee commutes + 38 trips for Central Satellites). The project's potential to result in a substantial permanent increase in ambient roadway noise levels is evaluated based on a comparison of project-related trips to existing and cumulative traffic conditions.

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a noise impact from the project would be significant if the project would result in:

1. A substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies
2. The generation of excessive groundborne vibration or groundborne noise levels
3. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the exposure of people residing or working in the project area to excessive noise levels

[3] It is possible that some of the 77 existing CalAm employees who are offered employment by the District would instead pursue employment opportunities at CalAm or another employer or retire. In these events, the District would hire other employees to fill the open positions. Given the nature of these employment opportunities, it is likely that non-CalAm employees that would be hired by the District currently live in the Monterey Peninsula area. Regardless, the key metric for this analysis is the number of net new employees hired by the District after acquisition of the MWS, which would be six.

[4] Although this scenario is possible, it is also possible that CalAm would utilize existing employees to operate and maintain the Central Satellites rather than hiring additional employees. As such, this is a conservative assumption for the purposes of analysis.

[5] Only the vehicle trips associated with the Central Satellites that are within the project area would be attributable to the proposed project because the project would potentially result in duplication of vehicle trips in the project area due to operation and maintenance of the Central Satellites separately from the MWS. The number of vehicle trips outside the project area would remain the same as existing conditions because these trips would not be duplicated by separate operations for the Central Satellites and the MWS given that District employees would only travel as far as the project area boundary to service the MWS. Refer to Section 4.5, *Transportation,* for additional detail.

[6] As further detailed in Section 4.5, *Transportation*, maximum daily trip estimates conservatively assume that all daily trips for each operations and maintenance activity would occur on the same day. In reality, it is likely that daily trips for different activities would occur on different days in any given month.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Impact N-1 THE PROPOSED PROJECT WOULD NOT GENERATE A SUBSTANTIAL TEMPORARY OR PERMANENT INCREASE IN AMBIENT NOISE LEVELS IN THE VICINITY OF THE PROJECT AREA IN EXCESS OF LOCAL STANDARDS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

On-Site Operations and Maintenance Noise

On-site operations and maintenance activities at MWS facilities such as inspections, cleaning, repairs, instrumentation, installations, replacements, and other routine tasks would be required for the water supply system; however, these activities would be similar to existing on-site operations and maintenance activities and would not result in new noise sources. In addition, the proposed project, which entails the transfer of ownership, would not result in the addition of new stationary sources of noise, such as other heavy equipment. Therefore, on-site operations and maintenance activities would not result in generation of a substantial temporary or permanent increase in ambient noise levels, and no impact would occur.

Roadway Noise

As discussed under Section 4.5.3(a), *Methodology and Significance Thresholds*, this analysis assumes there would be little to no change in the length, distribution, or number of vehicle trips required to operate and maintain the MWS after its acquisition. Therefore, this analysis focuses on roadway noise generated by the net change in vehicle trips in the project area due to the net increase of approximately 12 employees hired by the District and CalAm as well as CalAm's operation and maintenance of the Central Satellites separately from the MWS following the District's acquisition. Vehicle trips associated with the net increase in employees would be required for home-work commute trips, and vehicle trips associated with the Central Satellites would be required for water quality sampling, inspections, repairs of leaks and breaks, backflow testing, dead-end flushing, meeting vendors for valve exercising or tank inspections, and meter reading, among other activities.

Neither the District nor the seven local jurisdictions in the project area have adopted a threshold for evaluating the significance of roadway noise impacts. Therefore, for the purposes of this analysis, the District has determined that traffic noise impacts would be significant if project-related trips would result in a 3-dBA increase in traffic noise, which would be a barely perceptible increase for the average healthy ear (Caltrans 2013). A doubling of traffic volumes would be necessary to cause a 3-dBA increase (Crocker 2007). As discussed in Section 4.5, *Transportation*, the project would potentially result in a net increase of approximately 62 daily trips. These net new trips would primarily utilize regional roadways, including SR 1, SR 68 West, and SR 68 East to travel through the project area and surrounding region. The potential addition of approximately 62 daily project-related trips to existing traffic volumes would be incremental (between approximately 0.08 and 1.9 percent of average daily traffic volumes on regional roadways, as discussed in Section 4.5, *Transportation,* and would not have the potential to double existing traffic volumes. Therefore, the project would not result in a 3-dBA increase in existing roadway noise. Impacts would be less than significant.

Mitigation Measure

No mitigation is required.

Threshold 2:	Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Impact N-2 THE PROPOSED PROJECT WOULD NOT RESULT IN THE GENERATION OF EXCESSIVE GROUNDBORNE VIBRATION OR GROUNDBORNE NOISE LEVELS. NO IMPACT WOULD OCCUR.

On-Site Operations and Maintenance Vibration

On-site operations and maintenance activities at MWS facilities such as inspections, cleaning, repairs, instrumentation, installations, replacements, and other routine tasks would be required for the water supply system; however, these activities would be similar to existing on-site operations and maintenance activities and would not result in new vibration sources. Therefore, on-site operations and maintenance activities would not result in generation of excessive groundborne vibration or groundborne noise levels, and no impact would occur.

Roadway Vibration

According to the FTA (2018) *Transit Noise and Vibration Impact Assessment Manual*, vibration generated by rubber-tired traffic on smooth roadways is rarely perceptible. As discussed in Section 4.5, *Transportation*, the potential 62 net new daily project-related trips would be made in rubber-tired vehicles that would primarily utilize regional roadways, including SR 1, SR 68 West, and SR 68 East to travel through the project area and surrounding region. These roadways are well-developed (i.e., smooth); therefore, existing vehicle traffic on these roadways does not generally result in groundborne vibration or associated groundborne noise. Furthermore, the potential addition of 62 daily project-related trips to existing traffic volumes would be incremental (between approximately 0.08 and 1.9 percent of average daily traffic volumes on regional roadways) and would not have the potential to increase traffic volumes such that excessive groundborne vibration or groundborne nose is generated. Therefore, no roadway vibration impacts would occur.

Mitigation Measure

No mitigation is required.

Threshold 3:	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Impact N-3 THE PROPOSED PROJECT WOULD NOT EXPOSE STAFF TO EXCESSIVE NOISE LEVELS FROM THE MONTEREY REGIONAL AIRPORT. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The Monterey Regional Airport is located within the project area at 200 Fred Kane Drive in Monterey. This airport is a commercial service aviation facility with two runways and currently serves approximately 53,827 flights annually with a forecast air traffic volume of 80,900 flights for year 2033. Portions of the project area are located within the Airport Influence Area. Although the majority of the airport's existing and forecast (year 2033) 65, 70, and 75 CNEL noise level contours

do not extend past the airport property boundary, the portion of the project area within 700 feet of the airport falls within the existing and forecast (year 2033) 65 and 70 CNEL noise level contours (Monterey County Airport Land Use Commission 2019).

The project would not impact existing aircraft operations such that noise from aircraft flights would increase as compared to existing conditions. Staff conducting operations and maintenance activities on properties within approximately 700 feet of the Monterey Regional Airport (i.e., within the 65 and 70 CNEL noise level contours) may be exposed to elevated noise levels during aircraft take-off and landing events. However, operations and maintenance activities would be similar to existing operations and maintenance activities and would not expose additional staff to elevated aircraft noise levels because no additional staff is anticipated to be needed for the proposed project. Furthermore, the District would be required to comply with California Occupational Safety and Health Administration regulations related to worker exposure to noise. Section 5096 of these regulations sets duration-based noise exposure limits for employees that require provision of personal protective equipment should exposure exceed the specified limits. These regulations would reduce employee exposure to high noise levels such that operational activities would not expose employees to excessive noise levels. Therefore, project operations would not expose people working in the project area to excessive noise levels, and impacts would be less than significant.

Mitigation Measure

No mitigation is required.

c. Cumulative Impacts

The geographic scope for cumulative noise impacts is generally limited to areas within 0.5 mile of the project area. This geographic scope is appropriate for noise because the proposed project's noise impacts would be localized and site-specific. The proposed project would result in no impacts related to noise generated by on-site operations and maintenance activities and vibration; therefore, regardless of whether cumulative impacts would occur, the project would not have a cumulatively considerable contribution with respect to these issues.

Buildout of cumulative development within and near the project area, including the projects listed in Table 3-1 in Section 3, *Environmental Setting*, would increase traffic volumes on local roadways. The Final Environmental Impact Report for the 2040 Association of Monterey Bay Area Governments (AMBAG) 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy determined that cumulative growth of approximately 3,851,598 annual vehicle miles traveled (VMT) by 2040 would result in significant roadway noise impacts in the AMBAG region (i.e., Monterey, Santa Cruz, and San Benito counties), which includes the project area (AMBAG 2018). Therefore, cumulative roadway noise impacts would be significant. However, as discussed in Section 4.5, *Transportation*, the project would only contribute approximately 0.4 percent to the annual VMT increase in Monterey County. Furthermore, project-related traffic of approximately 62 daily trips and approximately 1,014 daily VMT would be negligible in comparison to the high volumes of traffic and VMT generated by the types of large residential, commercial, hotel, industrial, and institutional projects listed in Table 3-1. Therefore, the project's contribution to the cumulative roadway noise impact would not be cumulatively considerable.

None of the cumulative projects listed in Table 3-1 in Section 3, *Environmental Setting*, are proposed to be located within the existing and forecast (year 2033) 65, 70, and 75 CNEL noise level contours of the Monterey Regional Airport (Monterey County Airport Land Use Commission 2019). Therefore, no cumulative impact related to noise from airport operations would occur.

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4.5 Transportation

This section of the EIR identifies and evaluates issues related to transportation in the project area and the potential impacts of the proposed project related to transportation.

4.5.1 Setting

a. Roadway Network

The roadway network in the project area traverses seven jurisdictions – unincorporated Monterey County and the cities of Carmel-by-the-Sea, Del Rey Oaks, Monterey, Pacific Grove, Sand City, and Seaside. The regional roadway network includes State Route (SR) 1, which is a two- to four-lane highway that runs north-south through the entire project area; SR 68 West, which is a two- to four-lane highway that runs northwest-southeast from SR 1 to the Pacific Ocean; SR 68 East, which is a two- to four-lane highway that runs east-west through the project area; and SR 218, which is a two- to four-lane highway that runs northwest-southeast between SR 1 to SR 68 East. The seven jurisdictions in the project area also contain a variety of major arterial, minor arterial, collector, and local streets:

- Carmel-by-the-Sea has approximately 30 miles of paved roadways with two major north-south streets (Junipero Street/Rio Road and San Carlos Street) and one major east-west street (Ocean Avenue) (City of Carmel-by-the-Sea 2010).
- Del Rey Oaks is served primarily by SR 218 and local residential streets.
- The circulation network in the city of Monterey includes a segment of SR 1, the entirety of SR 68 East, six major arterial streets, 18 minor arterial streets, and 50 collector roads (City of Monterey 2016).
- The portion of unincorporated Monterey County in the project area is served by SR 1, SR 68 East, Carmel Valley Road (County Road G16), Laureles Grade, local residential streets, and rural roads.
- Pacific Grove is served by four main roadways – SR 68 West, Central Avenue, High Street, and Taylor Street – as well as five other arterial streets and 19 collector streets (City of Pacific Grove 1994).
- Sand City is bisected by SR 1 and contains a variety of collector and local streets with no arterial streets (City of Sand City 2002).
- The circulation network of Seaside includes SR 1, SR 218, ten major arterial streets, four minor arterial streets, and 21 collector streets (City of Seaside 2003).

Existing daily traffic volumes for SR 1, SR 68 West, SR 68 East, and SR 218 are summarized in Table 4.5-1, and existing daily traffic volumes for major arterial, minor arterial, and collector streets in and adjacent to the project area are summarized in Table 4.5-1. Current traffic counts for roadways in Carmel-by-the-Sea are not available; however, the most recent comprehensive traffic counts taken in 2009 estimate daily traffic volumes on local roadways to be between approximately 1,400 to 11,400 vehicles (City of Carmel-by-the-Sea 2009).

Table 4.5-1 Existing (2018) Traffic Volumes on Regional Roadways in Project Area

Roadway	Post Mile	Description	Back AADT[1]	Ahead AADT[2]
SR 1	68.335	Yankee Point Drive North (unincorporated Monterey County)	6,350	6,850
	71.179	San Jose Creek Bridge (unincorporated Monterey County)	10,700	10,700
	72.614	Rio Road (Carmel-by-the-Sea)	10,100	15,300
	72.921	Carmel Valley Road (Carmel-by-the-Sea)	15,300	34,500
	73.800	Ocean Avenue (Carmel-by-the-Sea)	37,900	37,000
	75.135	Junction with SR 68 West (Pacific Grove)	43,200	52,100
	75.733	South City Limit of Monterey (Monterey)	52,100	52,100
	75.754	Munras Avenue (Monterey)	52,100	48,700
	77.379	Aguajito Road (Monterey)	57,000	91,200
	78.119	Junction with SR 68 East (Monterey)	84,600	61,500
	78.883	Del Monte Avenue (Monterey)	64,700	79,100
	79.357	Junction with SR 218 (Seaside)	72,000	77,200
	80.679	Ord Village (Seaside)	83,500	81,100
SR 68 West	0	Asilomar Beach State Park (Pacific Grove)	n/a	3,200
	0.224	Sunset Drive east of Asilomar (Pacific Grove)	3,700	4,200
	1.120	Forest Avenue (Pacific Grove)	10,700	18,600
	1.500	Prescott Lane (Pacific Grove)	16,000	17,300
	1.990	Presidio Boulevard (Pacific Grove)	23,100	23,100
	3.948	Junction with SR 1 (unincorporated Monterey County)	30,400	26,500
SR 68 East	6.812	Northwest Junction with SR 218 (Monterey)	27,000	23,300
	11.221	Laureles Grade Road (unincorporated Monterey County)	32,100	25,500
SR 218	0	Junction with SR 1 (Seaside)	n/a	29,700
	0.220	East of Del Monte Boulevard Eastbound (Seaside)	29,700	16,100
	0.920	Fremont Boulevard (Seaside)	16,300	25,500
	0.100	Del Rey Oaks	25,500	19,500
	1.956	Junction with SR 68 (Del Rey Oaks)	17,500	n/a

AADT = average annual daily traffic; SR = State Route; n/a = not applicable (traffic counts are not available because these points represent the start points or endpoints of highways)

1 Back AADT usually represents traffic volumes south or west of the count location.

2 Ahead AADT usually represents traffic volumes north or east of the count location.

Source: California Department of Transportation 2020

Table 4.5-2 Existing (2018) Traffic on Local Roadways in Project Area

Jurisdiction	Roadway	Segment	ADT
Del Rey Oaks	General Jim Moore Boulevard	Between SR 218/Canyon Del Rey Boulevard and South Boundary Road	4,797
Monterey (City)	Abrego Street	Between El Dorado Street and Fremont Street	13,874
	Camino Aguajito	Between 10th Street and Fremont Street	14,007
	Camino Aguajito	Between Glenwood Circle and SR 1 Southbound On-ramp	10,182
	Camino El Estero	Between Fremont Street and Webster Street	12,238
	David Avenue	Between SR 68 and Ransford Avenue	9,061
	David Avenue	Between Lighthouse Avenue and Foam Street	6,312
	Del Monte Avenue	Between Camino EI Estero and Camino Aguajito	34,715
	Foam Street	Between Lighthouse Avenue and Reeside Avenue	12,957
	Franklin Street	Between Tyler Street and Washington Street	10,729
	Franklin Street	Between Pierce Street and Pacific Street	6,519
	Fremont Boulevard	Between SR 1 Northbound On-ramp and Del Monte Avenue	27,501
	Fremont Street	Between Camino El Estero and Camino Aguajito	32,030
	Fremont Street	Between Abrego Street and Munras Avenue	17,642
	Glenwood Circle	Between Iris Canyon Road and Aguajito Road	2,490
	Hawthorne Street	Between David Avenue and Eardley Avenue	9,098
	Lighthouse Avenue	Between Pacific Avenue and Foam Street	52,388
	Lighthouse Avenue	Between Private Bolio Road and Reeside Avenue	44,065
	Lighthouse Avenue	Between Del Monte Avenue and Tunnel	43,978
	Munras Avenue	Between Soledad Drive and Via Buena Vista	26,112
	North Fremont Street	Between Palo Verde Avenue and Dela Rosa Avenue	18,429
	Pacific Street	Between Sloat Avenue and Lighthouse Curve	13,474
	Pearl Street	Between Camino El Estero and Camino Aguajito	5,818
	Private Bolio Road	Between Hawthorne Street and Lighthouse Avenue	2,733
	Soledad Drive	Between Pacific Street and Munras Avenue	15,131
	Via Lavendera	Between Fishnet Road and Glenwood Circle	5,840
Monterey County	Aguajito Road	Between Loma Alta Road and Monhollan Road	772
	Carmel Valley Road	Between Pacific Meadows Lane and Del Mesa Drive	21,039
	Carmel Valley Road	Between Valley Greens Drive and Williams Ranch Road	15,793
	Carmel Valley Road	Between Scarlett Road and Rancho Fiesta Road	19,961
	Carmel Valley Road	Between Rio Vista Drive and Via Mallorca	22,638
	Laureles Grade	Between Southview Lane and Camino Escondido Road	5,252
	Ocean Avenue	Between SR 1 and Hatton Road	11,774
Pacific Grove	David Avenue	Between SR 68 and Seaview Avenue	9,389
	Forest Avenue	Between SR 68 and Beaumont Avenue	9,126
	Lighthouse Avenue	Between 17th and 18th Streets	8,028
	Lighthouse Avenue	Between Fountain Avenue and Grand Avenue	9,490

Jurisdiction	Roadway	Segment	ADT
	Lighthouse Avenue	Between Alder Street and Bentley Street	5,420
	Presidio Boulevard	Between SR 68 and Austin Avenue	7,287
Sand City	La Playa Avenue	Between Del Monte Avenue and California Avenue	13,822
Seaside	Broadway Avenue	Between Fremont Boulevard and Terrace Avenue	11,115
	Del Monte Avenue	Between Roberts Avenue and Canyon Del Rey Boulevard	25,500
	Del Monte Boulevard	Between Tioga Avenue and Afton Avenue	11,183
	Del Monte Boulevard	Between SR 218/Canyon Del Rey Blvd Boulevard and Palm Avenue	24,994
	Fremont Boulevard	Between SR 218/Canyon Del Rey Boulevard and Portola Drive	23,227
	Fremont Street	Between Cassanova Avenue and Canyon Del Rey Boulevard	28,115
	General Jim Moore Boulevard	Between Coe Avenue and Broadway Ave	7,418
	General Jim Moore Boulevard	Between Coe Avenue and McClure Way	6,636
	General Jim Moore Boulevard	Between South Boundary Road and Broadway Avenue	6,170

ADT = average daily traffic; SR = State Route

Note: Traffic counts were not available for any segments in Carmel-by-the-Sea.

Source: Transportation Agency for Monterey County 2020a

b. Public Transit Services

Public transit facilities are located throughout the project area. Monterey-Salinas Transit (MST) provides public transportation services to the Monterey Peninsula, Carmel Valley, and other regions of Monterey County. The project area and immediate vicinity are serviced by the following bus routes (MST 2020):

- Carmel-by-the-Sea: Routes 2, 4, 11, 22, 24, 91, 92, and 94
- Del Rey Oaks: Routes 7 and 8; DRO Shuttle
- Monterey: Routes 1, 2, 3, 7, 12, 14, 18, 19, 20, 21, 22, 24, 55, 56, 70, 72, 74, 75, 76, 78, 91, 93, 94, A and B; DRO Shuttle; MST Trolley
- Unincorporated Monterey County: Routes 4, 22, 24, 91, and 92
- Pacific Grove: Routes 1 and 2
- Sand City: Routes 8, 11, 18, 19, 20, 55, 75, 78, 91, 94, A, and B; DRO Shuttle
- Seaside: Routes 8, 11, 12, 18, 20, 55, 75, 76, 78, 94, A, and B; DRO Shuttle

Passenger rail/light rail service is not currently available in the project area. The Transportation Agency of Monterey (TAMC) is currently considering the feasibility of providing rapid bus service along an eight-mile segment of the Monterey Branch Line alignment from Monterey to Marina (TAMC 2020b).

c. Bicycle and Pedestrian Facilities

Bicycle facilities in the project area consist of Class I, II, and III bikeways. Class I bike paths are facilities with a separate right-of-way with crossflows by vehicles minimized. Class II bike lanes provide a striped lane for one-way bicycle travel on the side of the street adjacent to vehicle traffic.

Class III bike routes consist of a roadway that is shared between bicycle and vehicle traffic with supplemental bike signage. As shown in Figure 4.5-1, Class I, II, and III bikeways are found throughout the project area.

Monterey County possesses 887 miles of bikeways (Association of Monterey Bay Area Governments [AMBAG] 2014). One of the major continuous bikeways in the project area is the Monterey Bay Coastal Recreation Trail (Coastal Rec Trail), which measures approximately 29 miles in length and stretches from Castroville in the north to the Monterey Peninsula and parts of Pebble Beach to the south. Most of the Coastal Rec Trail consists of Class I bikeways, but short sections are Class II and Class III (TAMC 2008). Another notable bike lane in the project area is the recently-constructed North Fremont Bike and Pedestrian Access and Safety Improvements Project in Monterey, which added protected bike lanes adjacent to the medians of North Fremont Street. In addition, the planned Fort Ord Regional Trail and Greenway project includes construction of a 28-mile multi-use trail generally encircling the cities of Seaside and Marina and the California State University, Monterey Bay campus, which run through a portion of the project area and would accommodate pedestrians and bicyclists as well as equestrians on some segments.

Pedestrian facilities are located throughout the project area along many arterial, collector, and local streets. Pedestrian crosswalks are provided at major intersections in the project area, many of which include pedestrian-activated signal devices.

4.5.2 Regulatory Setting

a. State Regulations

Senate Bill 743

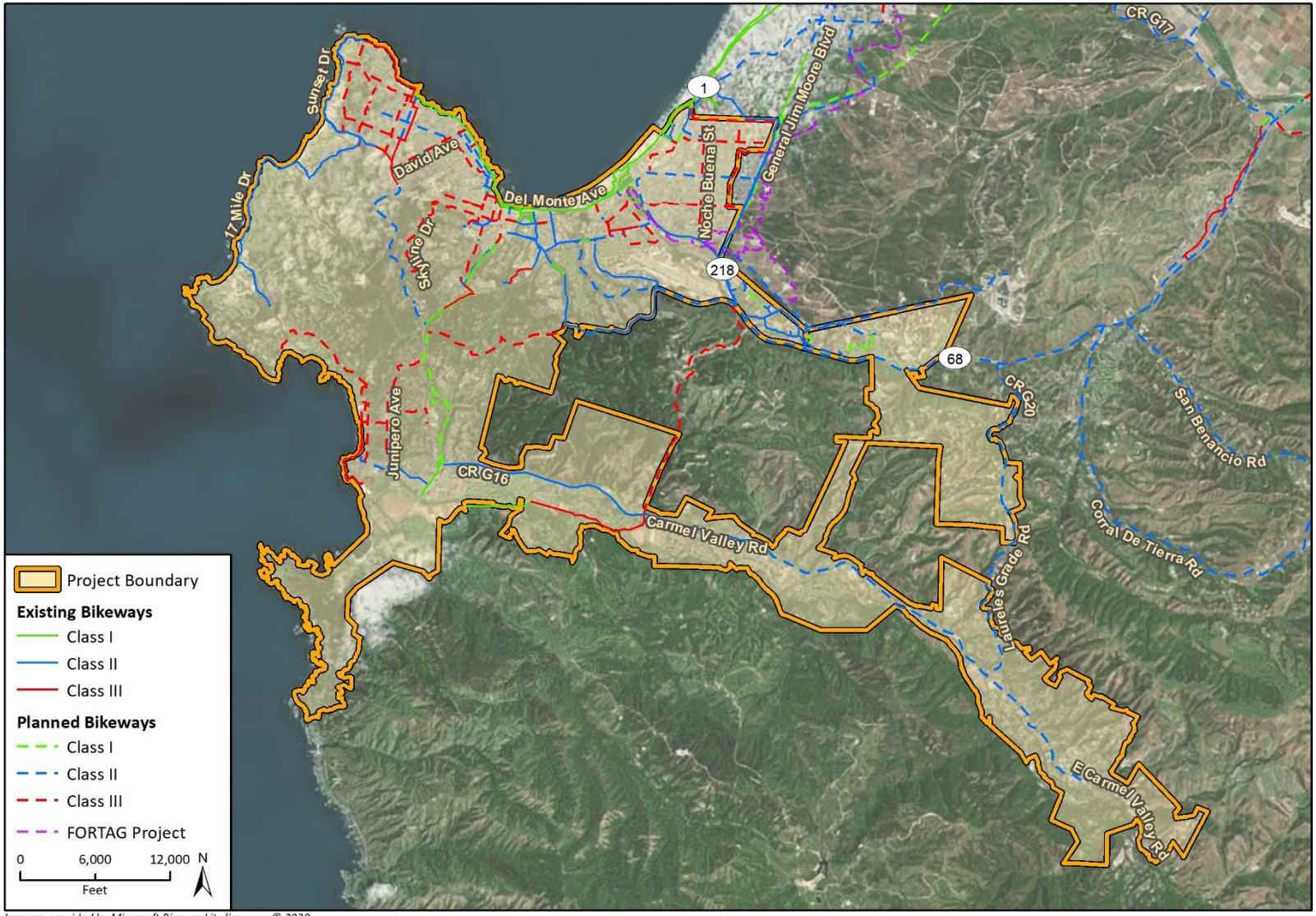
To further the State's commitment to the goals of Senate Bill (SB) 375, Assembly Bill (AB) 32, and AB 1358, SB 743 adds Chapter 2.7, *Modernization of Transportation Analysis for Transit-Oriented Infill Projects*, to Division 13 (Section 21099) of the Public Resources Code. Key provisions of SB 743 include reforming California Environmental Quality Act (CEQA) analyses for aesthetics and parking for urban infill projects and replacing the metric for transportation impacts of automobile delay with vehicle miles traveled (VMT) for all projects evaluated under CEQA. Under SB 743, the focus of the environmental impacts of transportation shift from driver delay to reduction of greenhouse gas (GHG) emissions, creation of multimodal networks, and promotion of a mix of land uses. As a result, level of service (LOS) standards become local policy thresholds as adopted among individual agencies rather than CEQA thresholds. Currently, official measures and significance thresholds related to VMT are still being developed and have not yet been adopted by the District or any of the seven jurisdictions in the project area.

b. Local Regulations

Association of Monterey Bay Area Governments 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy

The 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS), approved by the AMBAG Board of Directors on June 13, 2018, is a comprehensive planning effort that coordinates land use patterns and transportation investments with the objective of developing an integrated, multimodal transportation system. The MTP/SCS is built on a set of integrated policies,

Figure 4.5-1 Bikeways in the Project Area



Imagery provided by Microsoft Bing and its licensors © 2020.
Additional data provided by the Transportation Agency for Monterey County, 2016.

Fig 4.5-1 Bikeways in the Project Area

strategies, and investments to maintain and improve the transportation system to meet the diverse needs of the region through 2040. The MTP/SCS describes where and how the region can accommodate the projected 42,000 additional households and 57,400 new jobs between 2018 and 2040 and details the regional transportation investment strategy over the next 20 years.

The MTP/SCS goals and policies emphasize the provision of bicycle, pedestrian, and transit facilities to accommodate alternative transportation use. The MTP/SCS recommends the provision of Complete Streets improvements, including pedestrian-oriented programs that are primarily implemented by local jurisdictions (AMBAG 2018a).

TAMC Regional Transportation Plan

The Regional Transportation Plan (RTP) prepared by the TAMC was most recently updated in 2018 and includes the following goals, which are tied to sets of objectives and performance measures (TAMC 2018a):

- **Access & Mobility:** Improve ability of Monterey County residents to meet most daily needs without having to drive. Improve the convenience and quality of trips, especially for walk, bike, transit, car/vanpool and freight trips.
- **Safety & Health:** Design, operate, and manage the transportation system to reduce serious injuries and fatalities, promote active living, and lessen exposure to pollution.
- **Environmental Stewardship:** Protect and enhance the County's built and natural environment. Act to reduce the transportation system's emission of GHGs.
- **Social Equity:** Reduce disparities in healthy, safe access to key destinations for transportation-disadvantaged populations. Demonstrate that planned investments do not adversely impact transportation-disadvantaged populations.
- **Economic Benefit:** Invest in transportation improvements – including operational improvements – that re-invest in the Monterey County economy, improve economic access and improve travel time reliability and speed consistency for high-value trips. Optimize cost-effectiveness of transportation investments.

TAMC Active Transportation Plan for Monterey County

The 2018 TAMC Active Transportation Plan (ATP) is an update of the 2011 Bicycle and Pedestrian Master Plan, which identifies all existing and proposed bicycle and pedestrian facilities in Monterey County. The ATP identifies remaining gaps in the bicycle and pedestrian network and opportunity areas for innovative bicycle facility design. Its vision is: "Active transportation will be an integral, convenient and safe part of daily life in Monterey County for residents and visitors of all ages and abilities." The goals of the ATP are as follows (TAMC 2018b):

- **Active Transportation Trips:** Increase the proportion of trips accomplished by biking and walking throughout Monterey County.
- **Safety:** Improve bicycle and pedestrian safety.
- **Connectivity:** Remove gaps and enhance bicycle and pedestrian network connectivity.
- **Equity:** Provide improved bicycle and pedestrian access to diverse areas and populations in Monterey County via public engagement, program delivery and capital investment.
- **Education:** Increase awareness of the environmental and public health benefits of bicycling and walking for transportation and recreation.

- **Quality Facilities:** Improve the quality of the bike and pedestrian network through innovative design and maintenance of existing facilities.

Carmel-by-the-Sea General Plan

The Carmel-by-the-Sea General Plan Circulation Element (2010) establishes the following goal for the city's circulation network that would be applicable to the proposed project:

- **Goal 1.** Provide and maintain a transportation system and facilities that promotes the orderly and safe transportation of people and goods while preserving the residential character and village atmosphere of Carmel.

The Carmel-by-the-Sea General Plan Circulation Element (2010) does not include an LOS standard.

Del Rey Oaks General Plan

The Del Rey Oaks General Plan Circulation Element (1997) includes the following goals for the city's circulation network that would be applicable to the proposed project:

- **Goal 1.** Provide for safe, convenient, energy-conserving, comfortable and healthful transportation for all people and goods by the most efficient and appropriate transportation modes that meet present and future travel needs of the City's residents.
- **Goal 2.** Provide or promote travel by means other than the single-occupant automobile.
- **Goal 3.** Prevent the significant adverse impact of through traffic on Highway 218 as well as on roads and streets.

Per the Del Rey Oaks General Plan, the City's LOS standard for City transportation facilities is LOS C or the 1995 LOS, whichever is lower (City of Del Rey Oaks 1997).

City of Monterey General Plan

The City of Monterey General Plan Circulation Element (2016) establishes automobile LOS standards of LOS D for roadway segments that are not within a multi-modal corridor and LOS E and F for roadway segments within completed multi-modal corridors.[1]

City of Monterey Multi-Modal Mobility Plan

The City of Monterey Multi-Modal Mobility Plan (2013) is focused on improving bicycle, pedestrian, and transit access within the city and establishes Multi-Modal Level of Service thresholds to measures impacts to the City's circulation system. The primary objectives of the plan are as follows:

- Reduce the number of collisions involving pedestrians and bicyclists each year.
- Create safe environments for youth walking and bicycling to school.
- Ensure that all pedestrian and bicycle infrastructure and crossings are safe and well lit.
- Reduce obesity rates and increase overall health in the city of Monterey.
- Educate the community how to safely and legally operate a bicycle and practice safe pedestrian behavior.

[1] The City's Multi-Modal Mobility Plan (2013) identifies completed multi-modal corridors as those within the Lighthouse/Foam, Downtown, or North Fremont Specific Plan areas (City of Monterey 2013).

- Enhance connections between modes of transportation to reduce congestion and provide flexibility within the transportation network.
- Improve ADA access and accommodations throughout the city.
- Promote active transportation and increase mode share by improving user convenience and through encouragement activities and programs.
- Encourage tourists to walk, bicycle and ride transit to explore Monterey.
- Create engaging and pleasurable pedestrian environments that enhance the visitor experience.
- Apply design standards and maintenance programs for bicycle and pedestrian facilities to ensure safety and longevity of facilities.
- Secure funding to implement bicycle, pedestrian and safe routes to school projects.

County of Monterey General Plan

The County of Monterey General Plan Circulation Element (2010) establishes the following goals and policies for the city's circulation network that would be applicable to the proposed project:

Goal C-1. Achieve an acceptable LOS by 2030.

Policy C-1.1. The acceptable LOS for County roads and intersections shall be LOS D, except as follows:

a. Acceptable LOS for County roads in Community Areas may be reduced below LOS D through the Community Plan process.

b. County roads operating at LOS D or below at the time of adopting this General Plan shall not be allowed to be degraded further except in Community Areas where a lower LOS may be approved through the Community Plan process.

c. Area Plans prepared for County Planning Areas may establish an acceptable LOS for County roads other than LOS D. The benefits which justify less than LOS D shall be identified in the Area Plan. Where an Area Plan does not establish a separate LOS, the standard LOS D shall apply.

Policy C-1.4. Notwithstanding Policy C-1.3, projects that are found to result in reducing a County road below the acceptable LOS standard shall not be allowed to proceed unless the construction of the development and its associated improvements are phased in a manner that will maintain the acceptable LOS for all affected County roads. Where the LOS of a County road impacted by a specific project currently operates below LOS D and is listed on the Capital Improvement and Financing Plans (CIFP) as a high priority, Policy C-1.3 shall apply. Where the LOS of a County road impacted by a specific project currently operates below LOS D and is not listed on the CIFP as a high priority, development shall mitigate project impacts concurrently. The following are exempt from this Policy except that they shall be required to pay any applicable fair share fee pursuant to Policies C-1.8, C-1.11, and /or other applicable traffic fee programs:

d. First single family dwelling on a lot of record;

e. Allowable non-habitable accessory structures on an existing lot of record;

f. Accessory units consistent with other policies and State Second Unit Housing law;

g. Any use in a non-residential designation for which a discretionary permit is not required or for which the traffic generated is equivalent to no more than that generated by a single family residence (10 average daily traffic); and

h. Minimal use on a vacant lot in a non-residential designation sufficient to enable the owner to derive some economically viable use of the parcel.

Goal C-2. Optimize the use of the County's transportation facilities.

Policy C-2.4. A reduction of the number of VMT per person shall be encouraged.

Pacific Grove General Plan

The Pacific Grove General Plan (1997) contains the following goals, policy, and program for the city's circulation network that would be applicable to the proposed project:

Goal 1. Create and maintain a road network that will provide for the safe and efficient movement of people and goods throughout the city consistent with the goals of the City and the protection of the environment.

Goal 2. Protect residential areas from high-volume, high-speed traffic and its impacts.

Goal 4. Limit the increase in auto use through Transportation System Management. Increase transit ridership, carpool, vanpooling, walking, and bicycling.

Policy 7. Limit the increase in VMT in accordance with Air Quality Management Plan goals.

a. **Program O.** Limit growth in VMT to about 4.5 percent between 1994 and 2005, primarily by discouraging employees and residents from driving alone.

Per the General Plan, the City's LOS standards are LOS C for arterial and collector streets during peak periods and LOS D for intersections that in 1994 were close to or at the limits of LOS D on arterial routes outside the downtown area (City of Pacific Grove 1997).

Sand City General Plan

The Sand City General Plan (2002) establishes the following goal and policy for the city's circulation network that would be applicable to the proposed project:

Goal 3.1. Enhance and maintain the Sand City street and highway system to promote the safe and efficient movement of vehicles throughout the city.

Policy 3.1.1. Maintain a minimum LOS of LOS D for all non-freeway streets within the city during peak hours, or as indicated within the Congestion Management Plan of the TAMC.

Seaside General Plan

The Seaside General Plan (2003) contains the following goal and policy for transportation in the city that would be applicable to the proposed project:

Goal C-1. Provide and maintain a city circulation system that promotes safety and satisfies the demand created by new development and redevelopment in Seaside.

Policy C-1.2. Improve the Seaside circulation system in concert with public and private land development and redevelopment projects to maintain the City standard of LOS C.

The City of Seaside is currently preparing *Draft Seaside 2040*, a comprehensive General Plan update, which presents different modal priorities than the currently-adopted 2003 General Plan and describes a vision for a multimodal network of complete streets (City of Seaside 2019). None of the goals and policies of *Draft Seaside 2040* would be applicable to the proposed project.

4.5.3 Impact Analysis

a. Methodology and Significance Thresholds

Methodology

This analysis estimates vehicle trips associated with existing and future operation of the proposed project, including potential impacts associated with traffic along area roadways. The existing Monterey Water System (MWS) is fully functional and would not require any additional new infrastructure to facilitate the proposed change in ownership. Therefore, the proposed project does not include any new construction activities; therefore, construction-related traffic impacts are not discussed further.

This analysis considers traffic associated with the proposed project, including trips generated by operations and maintenance activities associated with the water supply system. The proposed project would include the District's acquisition and subsequent operation of the MWS. The MWS would maintain its existing size and capacity, including, but not limited to, the lease of one desalination plant, 33 water wells, six water treatment facilities, 614 miles of pipe, the Monterey Pipeline and Pump Station, 74 pump stations, 108 finished water storage facilities, 3,496 fire hydrants, an estimated 12,000 distribution valves, and 117 assessor parcels with a total area of approximately 4,753 acres along with planned facilities associated with the Monterey Peninsula Water Supply Project, including the Carmel Pump Station, the 6.4 million gallon per day Desalination Plant, and associated infrastructure improvements. No new facilities are proposed under the project; however, operation and maintenance events would occur as part of the ongoing operation and maintenance of the MWS, similar to baseline conditions. As discussed in Section 2, *Project Description*, the District would operate the system out of the existing California American Water Company (CalAm) main office at 511 Forest Lodge Road, #100 in Pacific Grove. Therefore, there would be little to no change in the length, distribution, or number of vehicle trips required to operate and maintain the MWS.

The proposed project does not include acquisition of the Central Satellites, which are small stand-alone water systems throughout Monterey County that consist of the Ambler Park, Chualar, Garrapata, Ralph Lane, and Toro systems. CalAm would retain ownership of these facilities and would continue to perform operations and maintenance activities related to these facilities. Vehicle

trips associated with the Central Satellites would be required for water quality sampling, inspections, repairs of leaks and breaks, backflow testing, dead-end flushing, meeting vendors for valve exercising or tank inspections, and meter reading, among other activities. Because actual field operations are not known, this analysis relies on the following conservative, reasonable, worst-case assumptions:

- Operations and maintenance trips would originate at a new CalAm corporate yard that would be located at a similar distance from the Central Satellites as the existing CalAm corporate yard in Pacific Grove.[2]
- Operations and maintenance trips for the Central Satellites under existing conditions are conducted in conjunction with operations and maintenance trips for the MWS. For example, under existing conditions, CalAm staff conduct operations and maintenance activities in the same vehicle trip for some locations in the MWS and some of the Central Satellite system locations. Under the proposed project, the portion of VMT within the project area related to trips to the Central Satellites would be net new VMT because the VMT efficiency of conducting operations and maintenance activities for the MWS and the Central Satellites in the same vehicle trip would be lost. As a result, this analysis assumes that a duplication of VMT would occur within the project area as District employees service the MWS and CalAm employees service the Central Satellites. Table 4.5-3 summarizes the trip distances from the corporate yard to the Central Satellites and to the edge of the project area.[3]

Table 4.5-3 Distance to Central Satellite Systems and Project Area Boundaries

Destination	One-Way Distance from Corporate Yard to Destination[1]
Ambler Park	16
Chualar	31
Garrapata	15
Ralph Lane	28
Toro	17
Edge of MWS via SR 1 North	9
Edge of MWS via SR 1 South	10
Edge of MWS via SR 68	12

[1] Assumes that operations and maintenance trips would originate at a new CalAm corporate yard that would be located at a similar distance from the Central Satellites as the existing CalAm corporate yard in Pacific Grove

MWS = Monterey Water System; SR = State Route

- Vehicle trips for leaks or breaks in the Central Satellites are currently made separately from other service activities under existing conditions; therefore, there would be no change in VMT from these activities under the proposed project.

[2] Although this scenario is possible, it is likely that CalAm would acquire a new corporate yard for its reduced fleet at a location that is closer to the Central Satellites, such as Ryan Ranch or Salinas. However, the assumption that the corporate yard would be located at a similar distance from the Central Satellites as existing conditions provides a more conservative analysis and is therefore used herein.

[3] It is possible that under existing conditions, CalAm services its Central Satellites separately from the MWS such that existing CalAm staff trips do not service both the Central Satellites and the MWS at the same time. In this scenario, there would be no change to VMT under the proposed project as compared to existing conditions because no VMT would be duplicated. However, the assumption that existing conditions result in VMT efficiency as compared to the proposed project provides a more conservative analysis and is therefore used herein.

- CalAm's wastewater operations would require the same VMT under the proposed project as under existing conditions.
- The VMT-reducing effect of advanced metering infrastructure is not included in this analysis.[4]

Data from the California State Water Resources Control Board (SWRCB) Division of Drinking Water and the Monterey County Health Department (MCHD) Environmental Health Bureau as well as expert knowledge from District staff were used to estimate the number of vehicle trips required to operate and maintain the Central Satellites. Trip estimate assumptions for activities related to each of the Central Satellites are summarized in Table 4.5-4 and described below:

- **Ambler Park.** Water quality is manually tested daily in conjunction with daily tests at the Toro system (SWRCB 2016a). Less frequent water quality tests (e.g., monthly post-treatment tests, quarterly coliform tests and analyzer calibration tests, triennial lead/copper tests, etc.) are performed in conjunction with daily water quality sampling. Security of the water tanks is inspected every six months, and an overall tank inspection occurs once every five years. The Ambler Park system has 403 connections; therefore, it is assumed all meters are read on one day per month.[5]
- **Chualar.** The distribution system is sampled semimonthly, source water is tested monthly, and other tests occur annually and triennially (SWRCB 2015). The two contact tanks are inspected once every five years. The system is flushed semiannually, and backflow testing occurs annually. The Chualar system has 196 connections; therefore, it is assumed all meters are read in one day per month.
- **Garrapata.** The Garrapata system is primarily operated remotely via online analyzers and a supervisory control and data acquisition (SCADA) system (MCHD 2018). One monthly visit is required to test source water on site. Water quality analyzers are calibrated quarterly; however, it is assumed that this is accomplished in conjunction with the monthly source water testing. One additional monthly visit is required for system inspection. The Garrapata system has 38 connections; therefore, it is assumed all meters are read in one day per month.
- **Ralph Lane.** The Ralph Lane system is primarily operated remotely via online analyzers and SCADA (MCHD 2017). One monthly visit is required to test source water on site. Water quality analyzers are calibrated quarterly; however, it is assumed that this is accomplished in conjunction with monthly source water testing. One additional monthly visit is required for system inspection. The Ralph Lane system has 30 connections; therefore, it is assumed all meters are read in one day per month.
- **Toro.** Water quality and treatment plant inflow and outflow are manually tested daily in conjunction with daily tests at the Ambler Park system (SWRCB 2016b). The intertie to Hidden Hills is manually inspected daily, and this inspection is performed by a different person than the one performing daily water quality testing. The five tanks are inspected at the same time once every five years. The Toro system has 417 connections; therefore, it is assumed all meters are read in one day per month.
- Six annual trips for miscellaneous needs are made to each system annually.

[4] Future implementation of advanced metering infrastructure would reduce VMT required to service the Central Satellites because meter readings could be conducted remotely. Although this scenario is possible, the assumption that advanced metering infrastructure is not implemented provides a more conservative analysis and is therefore used herein.
[5] Approximately 500 meters can be read on a typical day (Stoldt 2020).

Table 4.5-4 Trip Estimates for Central Satellites

Activity	Maximum Number of Daily One-Way Trips[1]	Maximum Number of Annual One-Way Trips[2]
Ambler Park		
Water Quality	2[3]	730[3]
Inspections	2	6
Meter Reading	2	24
Other/Miscellaneous	2	12
Total	**8**	**772**
Chualar		
Water Quality	2	48
Flushing/Backflow	2	6
Meter Reading	2	24
Other/Miscellaneous	2	14
Total	**8**	**92**
Garrapata		
Water Quality	2	24
Inspections	2	24
Meter Reading	2	24
Other/Miscellaneous	2	12
Total	**8**	**84**
Ralph Lane		
Water Quality	2	24
Inspections	2	24
Meter Reading	2	24
Other/Miscellaneous	2	12
Total	**8**	**84**
Toro		
Water Quality	0[3]	0[3]
Inspections	2	732
Meter Reading	2	24
Other/Miscellaneous	2	12
Total	**6**	**768**

[1] Maximum daily trip estimates conservatively assume that all daily trips for each activity would occur on the same day. In reality, it is likely that daily trips for different activities would occur on different days in any given month.

[2] Maximum annual trip estimates conservatively assume that all trips for each activity would occur in the same year. In reality, some activities would not occur during the same year. For example, Toro system tank inspections that occur every five years may occur during a different year than Ambler Park tank inspections that occur every five years.

[3] Trip estimates for water quality tests at the Ambler Park system include trips for water quality tests at the Toro system.

The District would offer employment to approximately 77 of the 81 existing staff CalAm staff associated with the MWS and would add approximately 10 additional positions in District administration related to billing, finance, and customer service.[6] In total, there would be approximately 87 employees hired by the District associated with the MWS, which would be a net increase of approximately six employees as compared to existing conditions (87 District employees – 81 existing CalAm employees). In addition, this analysis conservatively assumes that CalAm would hire approximately six additional employees to operate and maintain the Central Satellites (e.g., one meter reader/utility worker, two operators, and three field crew).[7] As a result, this analysis assumes the project would result in a net increase of approximately 12 employees (approximately 6 District employees + approximately 6 CalAm employees). The net increase of approximately 12 employees would generate approximately 24 net new daily one-way vehicle trips (approximately 12 employees x two one-way home-work commute trips), or approximately 6,240 annual one-way vehicle trips (conservatively assuming 260 work days per year). To provide a conservative estimate of VMT impacts, it is assumed that these net new employees would commute approximately 25 miles one-way, which is the distance between Pacific Grove and Salinas.[8, 9] Therefore, the net increase of approximately 12 employees would generate approximately 600 net new daily VMT.

Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, impacts related to transportation would be significant if the proposed project would:

1. Conflict with an applicable plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities
2. Conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)
3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)
4. Result in inadequate emergency access

CEQA Guidelines Section 15064.3(b) identifies criteria for evaluating transportation impacts. Specifically, the guidelines state VMT exceeding an applicable threshold of significance may indicate a significant impact. According to CEQA Guidelines Section 15064.3(b)(3), a lead agency may include a qualitative analysis of operational and construction traffic. Pursuant to CEQA Guidelines Section 15064.3(c), the provisions of this section do not apply statewide until July 1, 2020, although a lead agency may elect to immediately apply the provisions of the updated guidelines. The District has

[6] It is possible that some of the 77 existing CalAm employees who are offered employment by the District would instead pursue employment opportunities at CalAm or another employer or retire. In these events, the District would hire other employees to fill the open positions. Given the nature of these employment opportunities, it is likely that non-CalAm employees that would be hired by the District currently live in the Monterey Peninsula area. Regardless, the key metric for this analysis is the number of net new employees hired by the District after acquisition of the MWS, which would be six.

[7] Although this scenario is possible, it is also possible that CalAm would utilize existing employees to operate and maintain the Central Satellites rather than hiring additional employees. As such, this is a conservative assumption for the purposes of analysis.

[8] Although this scenario is possible, it is likely that the new District employees would live closer to Pacific Grove office in locations such as Marina, Seaside, Del Rey Oaks, Monterey, Pacific Grove, Carmel-by-the-Sea, or the unincorporated communities and neighborhoods in the project area. For context, the standard home-work trip distance assumption used in CalEEMod is 10.8 miles for Monterey County (California Air Pollution Control Officers Association 2017). The assumptions made herein are therefore considered conservative.

[9] It is assumed that the new CalAm corporate yard would be located at a similar distance from the Central Satellites as the existing CalAm corporate yard in Pacific Grove. Although this scenario is possible, it is likely that CalAm would acquire a new corporate yard for its reduced fleet at a more centralized location that is closer to the Central Satellites, such as Ryan Ranch or Salinas, which could result in reduced employee commute distances. However, the assumption that the corporate yard would be located at a similar distance from the Central Satellites as existing conditions provides a more conservative analysis and is therefore used herein.

elected to immediately apply the provisions of the updated guidelines in advance of July 1, 2020; therefore, this analysis evaluates transportation impacts in terms of VMT rather than LOS.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Impact T-1 THE PROPOSED PROJECT WOULD NOT CONFLICT WITH A PROGRAM, PLAN, ORDINANCE OR POLICY ADDRESSING THE CIRCULATION SYSTEM, INCLUDING TRANSIT, ROADWAY, BICYCLE AND PEDESTRIAN FACILITIES. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The primary plans that address the circulation system in the project area are the AMBAG 2040 MTP/SCS, the TAMC RTP, the TAMC ATP, the City of Monterey Multi-Modal Mobility Plan, and the seven local jurisdictions' general plans. Each of these plans addresses various modes of transportation, including vehicles, bicycles, pedestrian, and transit and include objectives and policies related to these modes of transportation. These plans are detailed in Section 4.5.2, *Regulatory Setting*.

The project does not include temporary or permanent modifications, additions, removals, or closures of transportation network infrastructure, such as roads, transit stops, bicycle lanes, bicycle parking stalls, or sidewalks. The project would result in a net increase of approximately 12 District and CalAm employees, who may utilize transit or alternative transportation infrastructure during their commutes. However, this would represent an incremental increase in the usage of transit and alternative transportation infrastructure in the project area and surrounding region.

As discussed under Section 4.5.3(a), *Methodology and Significance Thresholds*, this analysis assumes there would be little to no change in the length, distribution, or number of vehicle trips required to operate and maintain the MWS after its acquisition. Therefore, this analysis focuses on the change in use of the circulation system related to the net increase of approximately 12 employees hired by the District and CalAm as well as CalAm's retention of the Central Satellites after the District's acquisition of the MWS. As discussed in Section 4.5.3(a), *Methodology and Significance Thresholds*, the net increase of approximately 12 District and CalAm employees would generate approximately 24 net new daily commute trips. Vehicle trips associated with the Central Satellites would be required for water quality sampling, inspections, repairs of leaks and breaks, backflow testing, dead-end flushing, meeting vendors for valve exercising or tank inspections, and meter reading, among other activities. As shown in Table 4.5-4 in Section 4.5.3(a), *Methodology and Significance Thresholds*, approximately 38 daily trips would be required for CalAm to operate and maintain the Central Satellites (8 trips for Ambler Park + 8 trips for Chualar + 8 trips for Garrapata + 8 trips for Ralph Lane + 6 trips for Toro). This analysis conservatively assumes all 38 daily trips would be net new trips.

Only the vehicle trips that are within the project area would be attributable to the proposed project because the project would potentially result in duplication of vehicle trips in the project area due to operation and maintenance of the Central Satellites separately from the MWS. The number of vehicle trips outside the project area would remain the same as existing conditions because these trips would not be duplicated by separate operations for the Central Satellites and the MWS given that District employees would only travel as far as the project area boundary to service the MWS.

The approximately 62 total net new trips associated with the project (approximately 24 trips for employee commutes + 38 trips for Central Satellites) would primarily utilize regional roadways,

including SR 1, SR 68 West, and SR 68 East, to travel through the project area and surrounding region. As shown in Table 4.5-1 in Section 4.5.1(a), *Roadway Network*, existing traffic volumes on regional roadways in the project area range from 3,200 average daily traffic (ADT) on SR 68 West in Pacific Grove to 91,200 ADT on SR 1 at its junction with Aguajito Road near the city of Monterey. The potential addition of approximately 62 project-related ADT to existing traffic volumes would be incremental (between approximately 0.08 percent of ADT on SR 1 and approximately 1.9 percent of ADT on SR 68 West) and would not conflict with regional and local plans and policies to provide for safe, efficient, and orderly transportation networks and to protect residential areas from high-volume through traffic. Therefore, project operation would not conflict with adopted policies, plans, or programs regarding roadways, public transit, bicycle, or pedestrian facilities because the proposed project would not significantly impact the circulation system, increase traffic congestion, substantially contribute additional ADT, or result in other long-term impacts.[10] As a result, transportation impacts would be less than significant.

Following the District's acquisition of the MWS under the proposed project, it likely that the CalAm executive team and staff based out of San Diego and New Jersey would need to travel less often to the project area, Sacramento, and San Francisco for conferences, hearings, settlement meetings, and rate cases.[11] In addition, it is likely that some travel by various stakeholders (e.g., California Public Utilities Commission, other public agencies) and members of the public between San Francisco/Sacramento and the project area for hearings and other meetings would also be reduced. The potential reduction in travel associated with the MWS would result in reduced vehicle trips in the project area, which would offset some of the vehicle trips associated with the proposed project. However, specific information on the change in travel by the CalAm executive team and staff, various stakeholders, and members of the public is not available at this time, and there are multiple variables (e.g., shifting patterns of teleworking and regional and airline travel due to COVID-19) that may also affect future travel patterns. Therefore, this analysis conservatively does not quantify or take credit for this trip reduction. Nevertheless, the potential reduction in travel and associated vehicle trips in the project area would further reduce project impacts that are already less than significant.

Mitigation Measure

No mitigation is required.

Threshold 2:	Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Impact T-2 THE PROJECT WOULD NOT CONFLICT OR BE INCONSISTENT WITH CEQA GUIDELINES SECTION 15064.3, SUBDIVISION (B). IMPACTS WOULD BE LESS THAN SIGNIFICANT.

CEQA Guidelines Section 15064.3(b) identifies criteria for evaluating transportation impacts. Specifically, the guidelines state VMT exceeding an applicable threshold of significance may indicate a significant impact. According to CEQA Guidelines Section 15064.3(b)(3), a lead agency may include

[10] As stated in Section 4.5.3(a), *Methodology and Significance Thresholds*, the District has elected to immediately apply the provisions of CEQA Guidelines Section 15064.3(b) in advance of July 1, 2020. Therefore, in accordance with CEQA Guidelines Section 15064.3(a), this analysis does not consider project impacts on automobile delay as a significant environmental impact.

[11] It is possible that CalAm will re-locate its main California office to Sacramento in 2024; however, this EIR analyzes project impacts as compared to existing baseline conditions at the time of publication of the NOP (April 2020). As of April 2020, the CalAm headquarters remains in San Diego. Regardless, this analysis does not quantify or take credit for these potential trip reductions; as such, the location of the CalAm headquarters does not influence the analysis presented herein.

a qualitative analysis of VMT. Pursuant to CEQA Guidelines Section 15064.3(c), the provisions of this section do not apply statewide until July 1, 2020, although a lead agency may elect to immediately apply the provisions of the updated guidelines. Currently, official measures and significance thresholds related to VMT are still being developed and have not yet been adopted by the District or any of the seven jurisdictions in the project area. However, the District has elected to apply the provisions of CEQA Guidelines Section 15064.3(b) and utilize guidance provided by the Governor's Office of Planning and Research *Technical Advisory on Evaluating Transportation Impacts in CEQA* (2018) to evaluate the significance of project impacts related to VMT.

A VMT calculation is typically conducted on a daily or annual basis, for long-range planning purposes. As discussed under Section 4.5.3(a), *Methodology and Significance Thresholds*, this analysis assumes there would be little to no change in the length, distribution, or number of vehicle trips required to operate and maintain the MWS after its acquisition. Therefore, this analysis focuses on the change in VMT related to the net increase in 12 employees hired by the District and CalAm as well as CalAm's retention of the Central Satellites after the District's acquisition of the MWS.

As discussed in Section 4.5.3(a), *Methodology and Significance Thresholds*, the net increase of 12 District and CalAm employees would generate approximately 600 net new daily VMT, which would equate to approximately 156,000 annual VMT (conservatively assuming 260 work days per year). VMT associated with the Central Satellites would be generated by vehicle trips for water quality sampling, operations and maintenance, inspections, repair of leaks and breaks, backflow testing, dead-end flushing, meeting vendors for valve exercising or tank inspections, and meter reading, among other activities. Table 4.5-5 summarizes total annual VMT associated with operations and maintenance of the Central Satellite systems, which is approximately 31,872 VMT.

Table 4.5-5 Total VMT for Central Satellites Operation and Maintenance

System	Maximum Number of Annual One-Way Trips[1]	Distance from Corporate Yard to Destination (miles per trip)[2]	Total VMT (miles)
Ambler Park	772	16	12,352
Chualar	92	31	2,852
Garrapata	84	15	1,260
Ralph Lane	84	28	2,352
Toro	768	17	13,056
Total	**1,784**	**n/a**	**31,872**

[1] See Table 4.5-4. Maximum annual trip estimates conservatively assume that all trips for each activity would occur in the same year. In reality, some activities would not occur during the same year. For example, Toro system tank inspections that occur every five years may occur during a different year than Ambler Park tank inspections that occur every five years.

[2] See Table 4.5-3.

VMT = vehicle miles traveled; n/a = not applicable

As with vehicle trips discussed under Impact T-1 above, only the portion of the VMT associated with the Central Satellite systems that is within the project area would be attributable to the proposed project because the project would potentially result in duplication of VMT in the project area due to operation and maintenance of the Central Satellites separately from the MWS. Table 4.5-6 and Table 4.5-7 summarize the potentially duplicated portion of daily and annual VMT attributable to

the proposed project, which would represent net increases in daily and annual VMT as compared to existing conditions. As shown therein, the project would potentially result in a maximum net increase of approximately 414 VMT per day, or 21,180 VMT per year, associated with the Central Satellites.

Table 4.5-6 Maximum Daily VMT for Central Satellites Operation and Maintenance Attributed to Proposed Project

System	Maximum Number of Daily One-Way Trips[1]	One-Way Distance from Corporate Yard to Edge of MWS (miles per trip)[2]	Total VMT Attributed to Proposed Project (miles)
Ambler Park	8	12	96
Chualar	8	12	96
Garrapata	8	10	80
Ralph Lane	8	9	72
Toro	6	12	70
Total	**38**	**n/a**	**414**

[1] See Table 4.5-4. Maximum daily trip estimates conservatively assume that all daily trips for each activity would occur on the same day. In reality, it is likely that daily trips for different activities would occur on different days in any given month.

[2] See Table 4.5-3.

VMT = vehicle miles traveled

Table 4.5-7 Maximum Annual VMT for Central Satellites Attributed to Proposed Project

System	Maximum Number of Annual One-Way Trips[1]	One-Way Distance from Corporate Yard to Edge of MWS (miles per trip)[2]	Total VMT Attributed to Proposed Project (miles)
Ambler Park	772	12	9,264
Chualar	92	12	1,104
Garrapata	84	10	840
Ralph Lane	84	9	756
Toro	768	12	9,216
Total	**1,784**	**n/a**	**21,180**

[1] See Table 4.5-4. Maximum annual trip estimates conservatively assume that all trips for each activity would occur in the same year. Some activities would not occur during the same year. For example, Toro system tank inspections that occur every five years may occur during a different year than Ambler Park tank inspections that occur every five years.

[2] See Table 4.5-3.

VMT = vehicle miles traveled

In total, the project would result in net increases of approximately 1,014 daily VMT (600 VMT for employee commutes and 414 VMT for Central Satellites) and 177,180 annual VMT (156,000 VMT for employee commutes and 21,180 VMT for Central Satellites). The Governor's Office of Planning and Research *Technical Advisory on Evaluating Transportation Impacts in CEQA* (2018) states, "Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with an SCS or general plan, projects that generate or attract fewer than 110 trips

per day generally may be assumed to cause a less-than-significant VMT impact." As discussed under Impact T-1, the project would generate approximately 62 ADT, which falls below the recommended screening threshold of 110 ADT. Furthermore, the project would potentially result in an increase of approximately 1,014 maximum daily VMT and 177,180 maximum annual VMT (see Table 4.5-6 and Table 4.5-7). As shown in Table 4.5-8, this would be an incremental (0.01 percent) increase as compared to 2015 and projected countywide 2040 average daily VMT under the AMBAG 2040 MTP/SCS (AMBAG 2018b).[12]

Table 4.5-8 Comparison of Project-Related Daily VMT to Countywide Daily VMT

Year	Baseline Daily VMT[1]	Project-Related Daily VMT	Percent of Baseline Daily VMT
2015	9,764,441	1,014	0.01%
2040 (with 2040 MTP/SCS)	12,091,679	1,014	0.01%

[1] Source: AMBAG 2018b

The goals and policies of the AMBAG 2040 MTP/SCS focus on accommodating new households and jobs, investing in the existing and planned regional transportation network, providing new facilities for alternative transportation use, and implementing Complete Streets policies. In addition, the goals and policies of the seven local jurisdictions' general plans focus on providing a safe transportation network, promoting alternative transportation and carpooling, and achieving acceptable LOS. The project would not be inconsistent with the goals of the AMBAG 2040 MTP/SCS or local general plans, which are aimed at reducing vehicle trips, VMT, and associated GHG emissions from typical land use development projects such as residential and commercial development rather than from maintenance and operation of existing water infrastructure such as would occur under the proposed project.

Because the project would not exceed the Office of Planning and Research's recommended screening criteria for small projects, would generate an incremental increase in VMT, and would not be inconsistent with the 2040 MTP/SCS or local general plans, impacts associated with VMT per CEQA Guidelines Section 15064.3 would be less than significant.

Following the District's acquisition of the MWS under the proposed project, it likely that the CalAm executive team and staff based out of San Diego and New Jersey would need to travel less often to the project area, Sacramento, and San Francisco for conferences, hearings, settlement meetings, and rate cases.[13] In addition, it is likely that some travel by various stakeholders (e.g., California Public Utilities Commission, other public agencies) and members of the public between San Francisco/Sacramento and the project area for hearings and other meetings would also be reduced. The potential reduction in travel associated with the MWS would result in reduced VMT, which would offset some or all the VMT associated with the proposed project. However, because specific information on the change in travel by the CalAm executive team and staff, various stakeholders, and members of the public is not available currently, this analysis conservatively does not quantify

[12] VMT data for Monterey County for year 2015 is the most recently available data and was considered the "existing" scenario in the AMBAG 2040 MTP/SCS and its Final Environmental Impact Report (AMBAG 2018a and 2018b).

[13] It is possible that CalAm will re-locate its main California office to Sacramento in 2024; however, this EIR analyzes project impacts as compared to existing baseline conditions at the time of publication of the NOP (April 2020). As of April 2020, the CalAm headquarters remains in San Diego. Regardless, this analysis does not quantify or take credit for these potential trip reductions; as such, the location of the CalAm headquarters does not influence the analysis presented herein.

or take credit for this VMT reduction. Nevertheless, the potential reduction in travel and associated VMT would further reduce project impacts that are already less than significant.

Mitigation Measure

No mitigation is required.

Threshold 3:	Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?

Impact T-3 THE PROPOSED PROJECT WOULD NOT SUBSTANTIALLY INCREASE HAZARDS DUE TO A DESIGN FEATURE OR INCOMPATIBLE USES. NO IMPACT WOULD OCCUR.

The proposed project does not include physical construction and would not result in any substantial change in the physical operations or maintenance activities associated with the MWS. Route operations and maintenance trips would continue to be made primarily via light-duty automobiles and light-duty trucks. Therefore, the project would not introduce a geometric design feature or incompatible use to the circulation network in the project area. As such, the project would not substantially increase hazards due to a geometric design feature or incompatible use, and no impact would occur.

Mitigation Measure

No mitigation is required.

Threshold 4:	Would the project result in inadequate emergency access?

Impact T-4 THE PROJECT WOULD NOT RESULT IN INADEQUATE EMERGENCY ACCESS. NO IMPACT WOULD OCCUR.

The proposed project does not include physical construction and would not result in any substantial change in the physical operations or maintenance activities of the MWS. Therefore, the project would not alter emergency access throughout the circulation network in the project area. As such, the project would not result in inadequate emergency access. No impact would occur.

Mitigation Measure

No mitigation is required.

c. Cumulative Impacts

The geographic scope of potential cumulative transportation impacts is Monterey County. Buildout of cumulative development within and near the project area, including the projects listed in Table 3-1 in Section 3, *Environmental Setting*, would increase traffic volumes on local roadways. As determined in the Final Environmental Impact Report for the AMBAG 2040 RTP/SCS (2018), the cumulative increase in traffic in the region would be significant due to increases in daily hours of vehicle delay, commuting time, congested VMT, and daily VMT. Therefore, cumulative traffic impacts during project operation would be potentially significant. However, project-related traffic of 42 ADT and 514 daily VMT would be negligible in comparison to current traffic volumes as well as the high volumes of traffic and VMT generated by the types of large residential, commercial, hotel,

industrial, and institutional projects listed in Table 3-1. As a result, the project's contribution to significant cumulative traffic impacts would not be cumulatively considerable.

4.6 Utilities and Service Systems

This section analyzes the environmental effects related to utilities and service systems associated with implementation of the proposed project. It discusses water, wastewater infrastructure and stormwater conveyance. Issues related to electricity, natural gas, telecommunication and solid waste services are addressed in Section 4.7, *Effects Found Less Than Significant*. Issues related to water demand can be found in Section 4.3, *Hydrology and Water Quality* and water quality, drainage and infiltration patterns, and flood hazards are discussed in Section 4.7, *Effects Found Less Than Significant*.

4.6.1 Setting

Water Service & Supply

California American Water

California American Water (CalAm) provides water to the project area through a combination of local water sources. As described in Section 2.4.1, *Water Supply Source*, of this EIR, the current sources of supply for the Monterey water system (MWS) include: wells pumping from the Carmel River, groundwater wells pumping from the Seaside Groundwater Basin, Aquifer Storage and Recovery (ASR), Sand City Desalination, and Pure Water Monterey. CalAm obtains most of its water supply from the Carmel Valley Alluvial Aquifer and the Seaside Groundwater Basin. However, due to the SWRCB-issued CDO, which limits pumping from the Carmel River, as well as adjudication of the Seaside Groundwater Basin, which requires pumpers of the basin to reduce pumping by 2021, CalAm is required to find an alternative water supply source.[1] CalAm's water supply is planned to be gradually replaced by a combination of sources including the proposed Monterey Peninsula Water Supply Project (MPWSP) and Pure Water Monterey Project. The proposed MPWSP includes construction and operation of a 6.4 million gallons per day (MGD) desalination plant which would provide 6,252 acre-feet per year (AFY) of water supply (CalAm 2016). The MPWSP was approved and the Environmental Impact Report (EIR) was certified by the California Public Utilities Commission (CPUC), the California Environmental Quality Act (CEQA) Lead Agency, on September 13, 2018. The Monterey Bay National Marine Sanctuary, the National Environmental Protection Act (NEPA) Lead Agency, has not yet issued a Record of Decision. CalAm is actively pursuing local, State and Federal approvals to construct the MPWSP.

The Pure Water Monterey Project was approved in 2015 and the 5.0 MGD Advanced Water Purification Facility became operational in 2019. Due to concerns regarding the timing of completion of the MPWSP Desalination Plant, Monterey One Water (M1W) and the District have released a Supplemental EIR for proposed modification to the Advanced Water Purification Facility to increase the capacity from 5.0 MGD to 7.6 MGD. The proposed modifications to the Pure Water Monterey Project would increase the amount of purified recycled water that could be produced from 6,500 AFY to 8,750 AFY. The proposed modification went before the M1W Board on April 27, 2020; at the meeting, the Draft EIR was not certified and thus no action was taken on the project. Table 4.6-1 outlines the current and projected water supplies for CalAm's entire water supply system in Monterey County, this includes both the MWS and the Central Satellite water systems.

[1] Information pertaining to the Seaside Groundwater Basin and Carmel Valley Alluvial Aquifer as well as the CDO and adjudication of the Seaside Groundwater Basin are described in detail in Section 4.3, *Hydrology and Water Quality*.

Table 4.6-1 Current and Projected Water Supplies (AFY)

Water Supply Sources	2015	2020	2025	2030	2035
Carmel River					
Carmel Valley Alluvial Aquifer	8,310	8,310	3,376	3,376	3,376
Seasonal Diversion	170	170	0	0	0
Groundwater Production					
Seaside Groundwater Basin[1]	2,251	1,820	774[3]	774[3]	774[3]
Salinas Valley Groundwater Basin	500	500	500	500	500
Garrapata Creek	35	35	35	35	35
Aquifer Storage and Recovery					
ASR Project	1,300	1,300	1,300	1,300	1,300
Desalination					
Sand City Desalination	300	300	300	300	300
Future Supply Projects					
MPWSP Desalination Plant	0	6,252	6,252	6,252	6,252
Pure Water Monterey[2]	0	3,500	3,500	3,500	3,500
Total	12,866	22,187	16,037	16,037	16,037

[1] Allocation reduced by 700 AFY for 25 years once the MPWSP Desalination Plant is online

[2] Projected water supply for the Pure Water Monterey Project does not include the additional water which may be generated by the expanded capacity Advanced Water Purification Facility, as the EIR was not certified and this supply is proposed as an alternative water supply source if the MPWSP encounters obstacles that prevent its timely, feasible implementation to satisfy the requirements of the CDO.

[3] Pursuant to adjudication of the basin.

Sources: CalAm 2016

Wastewater Collection and Treatment

Monterey One Water

Within the cities of Pacific Grove and Monterey the local jurisdictions operate and maintain the sewer systems, while the Seaside County Sanitation District maintains sanitary sewer collection systems within the cities of Del Rey Oaks, Seaside, and Sand City. Wastewater treatment is provided to these sewer systems by M1W at their Regional Treatment Plant (RTP) located approximately two miles north of the city of Marina off Charles Benson Road. In addition to the project area, M1W provides wastewater treatment, disposal, and reclamation services for the cities of Del Rey Oaks, Marina, Salinas; Castroville, Moss Landing, and Boronda Community Service Districts; and the former Fort Ord military base. Further, M1W owns and maintains sewer infrastructure that conveys wastewater from the furthest parts of their service area through other member communities to the RTP. In total, M1W operates and maintains 25 pump stations, 35 pressure-vacuum stations, approximately 30 miles of pipeline from each pump station to the RTP (M1W 2020).

The RTP receives and treats residential, commercial, and industrial wastewater. Wastewater undergoes primary and secondary treatment at the treatment plant before reuse or discharge.

Reuse is generally for agricultural applications and irrigation, and thus, occurs primarily during the summer growing season. In winter months, treated wastewater from the RTP is primarily discharged. Discharge is to the Monterey Bay through a diffuser outlet located approximately two miles offshore at a depth of approximately 100 feet below mean sea level. The treated water meets and exceeds all State discharge requirements (M1W 2017).

The treated wastewater discharge is regulated by the Central Coast RWQCB under the Waste Discharge Requirements for the M1W RTP (Order No. R3-2014-0013, NPDES Permit No. CA0048551). The diffuser outlet in Monterey Bay is designed to convey ultimate wet weather flows of 81.2 million gallons daily, which is the permitted rate of discharge through the outfall (Central Coast RWQCB 2014). Pursuant to the permit, the RTP has a maximum average dry weather design treatment capacity of 29.6 MGD and peak wet weather design capacity of 75.6 MGD, however it currently receives and treats approximately 18 MGD of wastewater with a peak wet weather flow of 36.8 MGD (M1W & District 2016). As a result, the RTP had unused but permitted treatment capacity of approximately 11.6 MGD during dry weather and about 38.3 MGD during peak wet weather conditions.

Carmel Area Wastewater District

Within the Carmel area, wastewater is collected, treated, and disposed of by the Carmel Area Wastewater District (CAWD). Specifically the CAWD service area includes the city of Carmel-by-the-Sea and the outlying areas including areas of the Del Monte forest to the north, Carmel Valley to the east extending as far as Quail Meadows and Del Mesa Carmel, Carmel Highlands to the south, and the Pacific Ocean to the west. The treatment plant also receives wastewater from the Pebble Beach unincorporated community, under a contractual arrangement with the Pebble Beach Community Services District. CAWD serves a population of 11,000 people as well as treatment and disposal for an additional 4,500 people in Del Monte Forest (CAWD 2020).

CAWD collection facilities consist of approximately 83 miles of sewer lines, five miles of force mains, and seven pump stations. Wastewater is conveyed to the CAWD's treatment plant, which is located south of Carmel on State Route (SR) 1, between the Crossroads area and the Carmel Meadows residential development. The District's current permitted treatment capacity is 3.0 MGD, however only about 1.2 to 1.4 MGD of daily dry weather inflow is currently estimated to be treated at the plant, which includes wastewater from Pebble Beach (LAFCO 2016). Thus, CAWD's treatment plant has an unused but permitted treatment capacity of approximately 1.6 to 1.8 MGD. In addition, CAWD in cooperation with the Pebble Beach Community Service District and the District provide up to 1.5 MGD of recycled water to irrigate seven golf courses, an equestrian center, the grounds of a private school, and some smaller landscaped areas within Pebble Beach as part of the Reclamation Project. Treated water that is not diverted as part of the Reclamation Project is discharged via CAWD's wastewater outfall pipe which extends approximately 650 feet offshore, south of the Carmel River Lagoon (LAFCO 2016).

Stormwater Conveyance

Storm drainage facilities within Monterey County are operated and maintained by the Monterey County Water Resources Agency. The cities of Carmel-by-the-Sea, Pacific Grove, Monterey, Sand City, and Seaside maintain the urban runoff system and natural drainage courses for their respective jurisdictions.

4.6.2 Regulatory Setting

a. Federal and State

As outlined in Section 2.3, *Regulatory Setting,* the proposed project is regulated by a variety of federal and State agencies and regulations, including the following: the federal Safe Drinking Water Act, the California Urban Water Management Planning Act (which includes 2018 Water Conservation Legislation and the California Water Conservation Act of 2009), the CPUC (regulates privately operated public utilities), and the SWRCB (regulates public drinking water systems).

b. Local

Locally, water within the project area is managed by the District. The District is a water resource planning/management entity and does not currently provide water service to retail customers. The District serves approximately 112,000 people within its 171 square-mile service area boundary and is funded by property tax, user fees, water connection charges, investments, grants, permit fees and project reimbursements. Functions of District include (District 2020):

- Augmenting the water supply through integrated management of ground and surface water
- Promoting water conservation
- Promoting water reuse and reclamation of storm and wastewater
- Fostering the scenic values, environmental qualities, native vegetation, fish and wildlife, and recreation on the Monterey Peninsula and in the Carmel River Basin

As part of its duties the District provides technical support and regulatory oversight to CalAm, and other smaller water systems. The District also manages production and use of water from the Carmel River and Seaside Groundwater Basin and has a number of ongoing programs to mitigate the effects of pumping from the Carmel River, such as Pure Water Monterey and ASR.

In addition, water policy is affected by the Monterey Peninsula Regional Water Authority (Regional Water Authority), a Joint Power Authority created in 2012 that consists of six peninsula cities: Carmel-by-the-Sea, Del Rey Oaks, Monterey, Pacific Grove, Sand City, and Seaside. The goal of the Regional Water Authority is to find a solution to the Monterey Peninsula water shortage due to the over-drafting of the Carmel River (Regional Water Authority 2020a). The Regional Water Authority adopted a Policy Position Statement on July 11, 2013 that establishes four basic criteria that any water project is expected to satisfy. The Regional Water Authority water portfolio to address these water shortages includes a combination of projects, namely desalination (MPWSP), groundwater replenishment (Pure Water Monterey), ASR and the Pacific Grove Local Water Project (Regional Water Authority 2020b).

Further, the following local policies and regulations pertaining to water supply and infrastructure are relevant to the proposed project. It is important to note that while Government Code 53091 generally exempts projects by water districts from the requirements of local building and zoning ordinances, the proposed project is generally consistent with these local policies and regulations.

County of Monterey

The County of Monterey General Plan Public Services Element (2010) contains the following policies that would be applicable to the proposed project:

Policy PS-2.1 Coordination among, and consolidation with, those public water service providers drawing from a common water table to prevent overdrawing the water table is encouraged

Policy PS-3.2 Specific criteria for proof of a Long Term Sustainable Water Supply and an Adequate Water Supply System for new development requiring a discretionary permit, including but not limited to residential or commercial subdivisions, shall be developed by ordinance with the advice of the General Manager of the Water Resources Agency and the Director of the Environmental Health Bureau. A determination of a Long Term Sustainable Water Supply shall be made upon the advice of the General Manager of the Water Resources Agency. The following factors shall be used in developing the criteria for proof of a long term sustainable water supply and an adequate water supply system:

a. Water quality;
b. Authorized production capacity of a facility operating pursuant to a permit from a regulatory agency, production capability, and any adverse effect on the economic extraction of water or other effect on wells in the immediate vicinity, including recovery rates;
c. Technical, managerial, and financial capability of the water purveyor or water system operator;
d. The source of the water supply and the nature of the right(s) to water from the source;
e. Cumulative impacts of existing and projected future demand for water from the source, and the ability to reverse trends contributing to an overdraft condition or otherwise affecting supply; and
f. Effects of additional extraction or diversion of water on the environment including on in-stream flows necessary to support riparian vegetation, wetlands, fish or other aquatic life, and the migration potential for steelhead, for the purpose of minimizing impacts on the environment and to those resources and species.
g. Completion and operation of new projects, or implementation of best practices, to renew or sustain aquifer or basin functions.

The hauling of water shall not be a factor nor a criterion for the proof of a long term sustainable water supply.

Policy PS-3.12:The County shall maximize the use of recycled water as a potable water offset to manage water demands and meet regulatory requirements for wastewater discharge, by employing strategies including, but not limited to, the following: a. Increase the use of treated water where the quality of recycled water is maintained, meets all applicable regulatory standards, is appropriate for the intended use, and reuse will not significantly impact beneficial uses of other water resources. b. Work with the agricultural community to develop new uses for tertiary recycled water and increase the use of tertiary recycled water for irrigation of lands currently being irrigated by groundwater pumping. c.

Work with urban water providers to emphasize use of tertiary recycled water for irrigation of parks, playfields, schools, golf courses, and other landscape areas to reduce potable water demand

City of Seaside

The City of Seaside General Plan Land Use Element (2003) contains the following goals and policies that would be applicable to the proposed project:

Goal LU-5: Collaborate with local and regional water suppliers to continue to provide quality water supply and treatment capacity to meet community needs

- **Policy LU-5.2**: Work cooperatively with local and regional water suppliers to ensure adequate water reserves
- **Policy LU-5.3**: Actively promote water conservation by City residents and businesses
- **Policy LU-5.4:** Promote the use of recycled water for irrigation of parks, golf courses, and public landscaped areas in the community

The City of Seaside is currently preparing *Draft Seaside 2040*, a comprehensive General Plan update, which includes updated goals and policies. The *Draft Seaside 2040* Community Facilities and Infrastructure Element (2019) contains the following goals and policies aimed at improving access to utility infrastructure:

Goal CFI-2 A sustainable water supply that supports existing community needs and long-term growth

Policy Regional Coordination. Continue to work cooperatively with local and regional water utilities, suppliers, and agencies to maintain an adequate water supply for existing uses and develop new water supplies for development of the former Fort Ord lands and redevelopment within the City

Goal CFI-3 Clean and sustainable groundwater

Policy Groundwater Monitoring. Coordinate with local organizations to ensure the City periodically assesses, monitors, and manages the quality of groundwater

Goal CFI-4 Well-maintained water and sewer systems that meet the City's current and future needs

Policy Level of Service. Work with utility owners to maintain the existing water and sanitary sewer systems to provide a high level of service to Seaside's neighborhoods

City of Monterey

The City of Monterey General Plan Public Facilities Element (2016) contains the following goals that would be applicable to the proposed project:

Goal K Continue cooperation with the Monterey Regional Water Pollution Control Agency to maintain an environmentally compliant closed system (system that complies with environmental regulations) that ultimately allows partial reuse of the wastewater

Goal I Continue to improve drainage and urban runoff quality throughout the City and maintain Monterey's status as a regional lead agency for storm water management programs

Goal m Develop long-term water supplies and conservation methods so that there is sufficient water to implement General Plan goals

Goal m.2 Encourage Cal-Am to maintain the City's water supply system in a good state of repair to prevent leakage and other water loss

City of Del Rey Oaks

The Del Rey Oaks General Plan Public Services and Open Space/Conservation Element (1997) contains the following goals and policies that would be applicable to the proposed project:

Goal 1 Provide water and maintain a water management policy that will provide a sufficient quantity of appropriate quality water to meet the needs of the existing and planned community

- **Policy S-7** The City shall identify public infrastructure needs to schedule improvements necessary for achieving long term land use and community development objectives
- **Policy S-8** The City shall encourage water allocation program identifying priority water connections

Goal 6 Recognize that water resources on the Monterey Peninsula are limited and that conservation of water will be encouraged

- **Policy C/OS-8** Surface water quality shall be maintained, and areas of ground water recharge kept free of contamination
- **Policy C/OS-11** The City shall work with the appropriate Water Management District to encourage water conservation, retrofitting, education, reclamation and reuse
- **Policy C/OS-12** Water usage and conservation of water will be considered as part of the land use decisions

City of Sand City

The Sand City General Plan Conservation and Open Space Element (2002) includes the following goals and policies that would be applicable to the proposed project:

Goal 3.10 Improve and maintain public utility systems to adequately serve existing and future development

- **Policy 3.10.4** The City will cooperate with CalAm and the District to develop a regional solution to the long-term water needs of the Monterey Peninsula by participating in any Seaside Groundwater Basin Management Strategy that may be pursued

Goal 5.2 Encourage and promote water conservation

- **Policy 5.2.1** The City supports District efforts to encourage water conservation. The City will participate in groundwater management actives of the Seaside Basin and storm water re-use planning efforts
- **Policy 5.2.2** The City requires new development to incorporate water conservation features in accordance with District guidelines

City of Pacific Grove

The Pacific Grove General Plan Public Facilities Element (1997) contains the following goal and policies that would be applicable to the proposed project:

Goal 1 Maintain an adequate level of service in the City's water system to meet the needs of existing and future development

- **Policy 1** Endeavor to ensure an adequate water supply for the City's future needs
- **Policy 8** Promote the reclamation of waste water for irrigation purposes (specifically, the golf course and cemetery)

City of Carmel-by-the-Sea

The Carmel-by-the-Sea General Plan Open Space and Conservation Element (2009) contains the following goals and policies that would be applicable to the proposed project:

Goal O7-6 Improve water conservation and promote water management techniques

- **Policy 7-19** Reduce per capita and total demand for water and wastewater treatment, and enhance storm water management through integrated and cost-effective design, technology, and demand reduction standards for new development and redevelopment
- **Policy 7-20** Encourage and implement water-saving techniques to reduce storm water volumes and increase percolation. Increase permeable surfaces and encourage on-site percolation to reduce storm water volume
- **Policy 7-22** Work with the District and CalAm, and other organizations to ensure adequate water supply, particularly during periods of prolonged drought and warm weather conditions

4.6.3 Impact Analysis

a. Methodology and Significance Thresholds

Based on Appendix G of the *State CEQA Guidelines*, impacts to utilities and service systems would be considered potentially significant if the proposed project would meet one of the following significance thresholds:

1. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects
2. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years
3. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments
4. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals
5. Comply with federal, State, and local statutes and regulations related to solid waste

As described in Section 2.5, *Project Characteristics*, the proposed project entails acquisition of CalAm's system facilities and related water rights but would not involve physical construction or increase the size of the existing water system. As a result, the proposed project would not result in a change in the manner of operation of the MWS or exercise of the associated water rights. As a result, the proposed project would result in no impact related to electric power, natural gas, telecommunication or solid waste. Therefore, checklist items 4 and 5 as well as the electric power, natural gas, and telecommunication aspects of checklist item 1 are analyzed in Section 4.7, *Effects Found Less Than Significant*. The remainder of Checklist item 1, as well as Checklist items 2, 3 and 5 are discussed below.

b. Project Impacts and Mitigation Measures

Threshold 1:	Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, the construction or relocation of which could cause significant environmental effects?
Threshold 3:	Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Impact UTIL-1 THE PROJECT WOULD NOT REQUIRE OR RESULT IN THE RELOCATION OR CONSTRUCTION OF NEW OR EXPANDED WATER, WASTEWATER TREATMENT, OR STORMWATER DRAINAGE AND WOULD NOT GENERATE WASTEWATER TREATMENT DEMAND IN EXCESS OF EXISTING SUPPLIES. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Water and Wastewater Treatment

As described in the Section 2.6, *Project Objectives,* one of the objectives of the proposed project, as outlined in the purpose of Measure J, is to provide cost-effective water service and lower the cost of service to ratepayers. Section 1.2, *Purpose and Legal Authority*, of this EIR describes that the setting of water rates is typically statutorily exempt under CEQA and that although water usage/demand may fluctuate in response to changes in water pricing, such fluctuations are not reasonably foreseeable and would be speculative to estimate. Further, ultimately, compliance with the SWRCB CDO that sets restrictions on pumping water from the Carmel River as well as the adjudication decision which established a "Natural Safe Yield" for the Seaside Groundwater Basin of 3,000 AFY would restrict the amount of water that may be pumped and would require the provision of replacement water to offset any water supply required in excess of what is allowed. In addition, laws and regulations such as the 2018 Water Conservation Legislation (AB 1668 and SB 606) and California Water Conservation Act of 2009 require specific goals to be set and milestones achieved towards reducing per capita water usage. With municipalization of the now privately-owned MWS under the proposed project, an UWMP would continue to be updated every five years, as required for an urban water supplier with 3,000 or more service connections or supplying 3,000 or more acre-feet of water per year. The existing UWMP includes goals, measures, procedures, and status reports for achieving reduced per capita water demand and ensuring water supply reliability. Future UWMPs for the MWS, whether prepared by the current owner or the District, would be required to provide the same information to demonstrate how the required per capita water usage reduction will be achieved. Further, areas within the District are subject to District rules and regulations which regulate the amount of water which can be used at each connection; areas proposed for annexation would also be subject to these rules and regulations. Therefore, as discussed in Section 4.3,

Hydrology and Water Quality of this EIR, water demand would not substantially increase as a result of the proposed project.

As the proposed project would continue to supply water to the same customer base for the same general purposes, it would not result in substantial changes to the way in which water is used in the service area and, therefore, would not directly influence the amount of wastewater generated in the service area. For example, residential customers would continue to dedicate roughly the same percentage of their water use to various activities such as watering plants, which does not result in wastewater flows, and washing dishes, which results in flows to the wastewater system. Therefore, the proportion of the water supply that is disposed of as wastewater after use would remain constant. Given that there would not be a substantial change to water demand and the proportion of water that enters the wastewater system would remain constant, wastewater generation also would not substantially increase as a result of the project.

In addition, the project does not propose any water treatment facilities, new water or sewer connections, and would not alter the rates or characteristics of existing wastewater discharges in the project area; therefore, the project would not alter the status of compliance of existing wastewater discharges with wastewater treatment requirements of the Central Coast RWQCB, and would not result in an exceedance of the capacity of a wastewater treatment provider. Similarly, because the project would not substantially alter water supply demands or associated wastewater discharge rates, the proposed project also would not require or result in the construction of new water or wastewater conveyance and treatment system or expansion of existing facilities.[2] Operation and maintenance of the water system would require occasional repair or upgrade of existing facilities, but such actions are typical of the operation and maintenance of a water system, would be required regardless of the ownership of the system, and would not constitute the construction or expansion of new or existing facilities. As a result, potential impacts associated with water demand as well as water and wastewater treatment would be less than significant.

Stormwater Drainage

Since the proposed project would not involve construction or expansion of facilities, it would not result in an increase in impermeable surfaces within the project area. Ongoing operation and maintenance activities would continue under the proposed project, using the same access roads and maintenance yards that are currently used to operate and maintain the system. In addition, no changes in non-stormwater runoff, i.e. due to landscape irrigation, would occur as no change in the demand for water supply would result from the proposed project. Thus, there would be no change in the amount of runoff occurring within the project area and no requirements to upgrade or expand existing stormwater conveyance systems. Potential impacts associated with stormwater generation would be less than significant.

Summary

The proposed project would not change the nature or amount of water used or the amount of wastewater or stormwater generated in the project area. Because the proposed project would not result in an increased demand, no relocation or construction of water, wastewater conveyance and treatment system, or stormwater drainage system which serve the project area would be required.

[2] As previously noted in Section 2, *Project Description,* environmental impacts from construction of the MPWSP Desalination Plant were analyzed under a separate environmental review process, the MWSP Environmental Impact Report/Environmental Impact Statement (EIR/EIS). It is important to note that this EIR does not analyze impacts associated with construction or operation of the MPWSP Desalination Plant, which was already reviewed and approved by the CPUC as part of the MWPSP EIR/EIS.

Further, as the proposed project would not result in generation of additional wastewater or stormwater, a determination by the wastewater treatment provider that the proposed project has adequate capacity to serve the project would not be required. Impacts related to the provision of these utility facilities would be less than significant.

Mitigation Measures

No mitigation is required.

Threshold 2:	Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Impact UTIL-2 THE PROPOSED PROJECT WOULD NOT RESULT IN SUBSTANTIAL NEW OR INCREASED WATER DEMANDS IN THE PROJECT AREA. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As outlined above in Section 4.3.2, *Regulatory Setting*, certain types of projects that are subject to CEQA are required to prepare a Water Supply Assessment (WSA) which assesses water supply reliability under varying drought conditions over a 20-year horizon. Section 4.3, *Hydrology and Water Quality*, of this EIR further explains that projects located within an adjudicated groundwater basin are exempt from preparing a WSA, and the annual Watermaster reports required per the adjudication of the Seaside Groundwater Basin fulfill the same purposes as a WSA. Based on the adjudication of the Seaside Groundwater Basin and the SWRCB CDO, CalAm must develop a replacement water supply to meet existing demand in the Monterey area. The 2015 UWMP assesses water supply availability in the project area, accounting for local groundwater supply limitations as well as future water supply projects, and with consideration to varying climatic (drought) conditions over a 25-year planning horizon. The 2015 UWMP determined that with existing water supply sources as well as future water projects such as ASR, MPWSP, and Pure Water Monterey Project, there are adequate water supplies to meet demands in the project area during average, single-dry, and multiple-dry years through the Year 2035 (CalAm 2016). In addition, any new operator of the water system would be required to comply with 2018 Water Conservation Legislation (AB 1668 and SB 606), which requires urban water suppliers to stay within annual water budgets, based on standards for their service areas, and the California Water Conservation Act of 2009, which mandates conservation goals for urban retail water suppliers. As a result, since the adjudication of the Seaside Groundwater Basin and the SWRCB CDO place an upper limit on water use and laws and regulations such as the 2018 Water Conservation Legislation (AB 1668 and SB 606) and California Water Conservation Act of 2009 set water conservation goal and requirements, the proposed project would not result in new or increased water demand in the project area and potential impacts associated with water supply availability would be less than significant.

Mitigation Measures

No mitigation is required.

c. Cumulative Impacts

The geographic scope for cumulative impacts is the MWS service area. As shown in Table 3-1, *Cumulative Projects List*, in Section 3, *Environmental Setting*, numerous development projects are anticipated in the vicinity of the project area. Cumulative development in the project area would add residential and non-residential development to the project area, as discussed below.

Cumulative buildout in the project area could introduce new and expanded water demands. These future water demands, including development projections based on allowable land uses in the project area, are accounted for in the current 2015 UWMP, which estimates that CalAm's service area will grow at a rate of just over two percent per year from 2010 through 2035 (CalAm 2016). The 2015 UWMP determined that, with existing water supply sources as well as future water projects such as MPWSP and Pure Water Monterey Project, there is adequate water supply to the project area to meet demands through 2035, including under varying climatic (drought) conditions (CalAm 2016). As development in the project area expands as predicted, it will become necessary to add additional connections to the existing water system. The exact location and connection would need to be determined at the time development is proposed and would be subject to subsequent environmental review. However, compliance with the adjudication of the Seaside Groundwater Basin and the SWRCB CDO as well as State and local policies and regulations would ensure that future connections to the water system are appropriately planned, designed, and implemented to avoid adverse effects. Further, implementation of planned projects, such as the MPWSP and/or the proposed modifications to the Pure Water Monterey Project outlined above, would also ensure water supply for cumulative buildout. Therefore, cumulative impacts due to water supply in the project area would be less than significant.

As discussed, the proposed project would not contribute to future increases in demand for water in the project area; future increased water demands would occur as a result of cumulative developments, regardless of the proposed project, i.e. transfer of ownership of the MWS. Therefore, the proposed project's contribution to the above stated less than significant cumulative impacts to water supply and water conveyance facilities would not be cumulatively considerable.

Similar to how future cumulative development in the project area could increase water demand, wastewater generation and stormwater runoff may also increase, thereby introducing a need for new or expanded facilities or infrastructure to accommodate these projects. These needs would be assessed on a project-by-project basis, and compliance with local municipal code and general plan policies as well as analysis of environmental impacts due utility expansion under CEQA, where appropriate, would ensure that future connections to these utilities are appropriately planned, designed, and implemented to avoid adverse effects. Further as outlined above, the RTP had unused but permitted treatment capacity of approximately 11.6 MGD during dry weather and about 38.8 MGD during peak wet weather conditions. With the available capacity at the RTP as well as local polices which require new development and redevelopment projects to provide adequate sewage collection infrastructure, cumulative impacts due to wastewater treatment and stormwater runoff in the project area would be less than significant.

Future planned upgrades to wastewater and stormwater facilities and/or infrastructure in the project area would be expanded and upgraded regardless of the water system ownership transfer that would occur under the proposed project. As described above under Impact UTIL-1, the project would not generate wastewater or stormwater. Therefore, the project's contribution to less than significant cumulative impacts would not be cumulatively considerable.

4.7 Effects Found Less Than Significant

The *State CEQA Guidelines* Section 15128 requires an EIR to briefly describe any possible significant effects that were determined not to be significant and, therefore, were not discussed in detail. This section addresses the potential environmental effects of the proposed Potential Water Supply Acquisition and District Boundary Adjustment project that clearly would not be significant and are not addressed in the preceding sections of this EIR.

The discussion is based on the thresholds contained in the *State CEQA Guidelines* Appendix G. Any items not addressed in this section are addressed in Sections 4.1 through 4.6 of this EIR.

4.7.1 Aesthetics

Based on Appendix G of the *State CEQA Guidelines*, a significant impact would occur if implementation of the proposed project would result in any of the following conditions:

1. Have a substantial adverse effect on a scenic vista
2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway
3. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage points); or in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality
4. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area

Aesthetics within the project area are varied and generally characterized by an abundance of highly valued scenic resources, which include coastal views along the Monterey Peninsula and inland views of the Santa Lucia Mountains. A portion of State Route (SR) 1 within the project area from San Luis Obispo County to the south up to the SR 68 intersection in the Monterey Peninsula is a designated state scenic highway, as is SR 68 from the SR 1 intersection eastward to the Salinas River (California Department of Transportation 2020).

General and area plans for Monterey County and the cities of Carmel-by-the-Sea, Del Rey Oaks, Monterey, Pacific Grove, Sand City, and Seaside contain policies to protect aesthetic resources in the project area. Aesthetic resources protected by various policies of jurisdictions within the project area include the Monterey coastline and scenic areas in the Carmel Valley For example, Goal F of the City of Monterey General Plan Urban Design Element is to “Maintain existing vistas and seek to improve new vista points seen from roadways, parks, and other public spaces. Collaborate with other agencies to protect city vistas and scenic amenities.”

The proposed project would not involve construction, demolition, or other physical changes that would result in aesthetic changes in the project area. The project would have no impact on scenic vistas, scenic resources, or visual character or quality, and would not create new sources of light or glare. There would be no impact relating to aesthetics.

4.7.2 Agriculture and Forestry Resources

Based on Appendix G of the *State CEQA Guidelines*, a significant impact would occur if implementation of the proposed project would result in any of the following conditions:

1. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use
2. Conflict with existing zoning for agricultural use, or a Williamson Act contract
3. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))
4. Result in the loss of forest land or conversion of forest land to non-forest use
5. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use

Monterey County contains significant agricultural and forestry resources. Agricultural land is generally found east of the project area in the Salinas valley, while the County's forest land is generally south of the project area in the Big Sur region as well as in the Carmel Valley to the southeast. Within and near the project area, there are several small parcels designated Prime Farmland and Farmland of Statewide Importance in unincorporated Monterey County to the south and east of the Monterey Peninsula, while the majority of the project area is designated Urban and Built Up Land or Other Land (California Department of Conservation 2016).

The proposed project would not result in any land use changes that could convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, or forest land. There would be no conflict with zoning for agricultural use, Williamson Act contracts, or timber land or forest land. As described in Section 4.6, *Utilities and Service Systems*, the project would not alter regional water supply or water demand, and thus would not impact the availability of water for agricultural use. There would no impact on agriculture or forestry resources.

4.7.3 Biological Resources

Based on Appendix G of the *State CEQA Guidelines*, a significant impact would occur if implementation of the proposed project would result in any of the following conditions:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service
3. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means

4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan

The majority of the project area is developed land within the cities of Carmel-by-the-Sea, Del Rey Oaks, Monterey, Pacific Grove, Sand City, and Seaside. The coastline along and north/south of the Monterey Peninsula provides habitat for a variety of wildlife including shorebirds and aquatic mammals. The bordering portion of the Pacific Ocean from Cambria to the south and Marin to the north is designated a National Marine Sanctuary administered by the United States Department of Commerce National Oceanic and Atmospheric Administration (NOAA). The Monterey Bay National Marine Sanctuary is a national focus for recreation, research, and education (NOAA 2008). The Carmel River, which runs east-west to the Pacific Ocean south of Carmel-by-the-Sea and provides a portion of the Monterey Water System (MWS) water supply, supports breeding populations of steelhead trout and California red-legged frogs (CDFW 2020). Additionally, various parks, open space areas, and waterways provide additional habitat for biological resources within the project area, such as Laguna Grande Regional Park in Monterey/Seaside and Frog Pond Wetland Preserve in Del Rey Oaks. The project area consists mostly of developed land, but contains various habitat types such as oak woodland and grassland. Numerous special status species are found within and near the project area, such as California tiger salamander, California red-legged frog, Monterey gilia, seaside birds-beak, Monterey spineflower, and eastwood's goldenbush (County of Monterey 2008a; CDFW 2020).

Ongoing maintenance and operation of the MWS, such as repair activities, that could impact biological resources would not be altered by the project. The project could result in lower water rates. If lowered rates resulted in an increase in water use, then increased withdrawals from the Carmel Valley Alluvial Aquifer could result in drawdown of the Carmel River, which could result in impact to steelhead trout and other species reliant on the river. However, as described in Section 4.3, *Hydrology and Water Quality*, any changes in water use related to the project would be regulated by adjudication of the basin and the cease and desist order for Carmel River withdrawals. Withdrawal from the Carmel River and other sources would not exceed permitted quantities.

Various plans, policies, and ordinances relating to the management and protection of biological resources are applicable to the project area, including local coastal programs and tree preservation ordinances. However, because the project would not involve construction or land use changes, there would be no potential for impact to species or habitat. Indirect impacts on biological resources resulting from changes in water price and use would be subject to regulation of the water supply, as described above. Therefore, impacts to biological resources would be less than significant.

4.7.4 Cultural Resources

Based on Appendix G of the *State CEQA Guidelines*, a significant impact would occur if implementation of the proposed project would result in any of the following conditions:

1. Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5
2. Cause substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5
3. Disturb and human remains, including those interred outside of dedicated cemeteries

Monterey County has been inhabited for thousands of years by ancestors of the Ohlone Costanoan Esselen Nation. Spanish explorers arrived in the 1600s. Over the next several hundred years, groups from many parts of the world arrived in waves of immigration, contributing to the region's rich and layered cultural history (County of Monterey 2008b).

According to Monterey County, most of the area affected by the proposed project is rated "moderate" or "low" for archaeological sensitivity (County of Monterey 2008b). Areas of moderate sensitivity with the potential to contain valued archaeological resources include the active sand dunes along the Seaside coast, where a prehistoric archaeological site has been previously identified. Del Rey Oaks and Sand City also contain areas of high prehistoric archaeological sensitivity (City of Seaside 2003).

Cultural history within the project area has been relatively well-preserved through the preservation of historic buildings. Cultural history contributes to the region's appeal as a tourism destination. Various buildings of historic significance exist throughout the project area, including some on the National Register of Historic Places, such as the Pacific Grove Inn in Pacific Grove and the Larkin House in Monterey (U.S. National Park Service 2020).

Because the project would not involve demolition, construction, or land use changes, there is no potential to physically affect cultural resources. The project would not cause a substantial adverse change in the significance of a historical or archaeological resource, and would not result in disturbance of human remains. There would be no impact on cultural resources.

4.7.5 Energy

Based on Appendix G of the *State CEQA Guidelines*, a significant impact would occur if implementation of the proposed project would result in either of the following conditions:

1. Result in in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation
2. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency

Energy use within the project area occurs through typical residential, commercial, and industrial activities. The area is served by Pacific Gas and Electric Company (PG&E) for electricity transmission and Monterey Bay Community Power (MBCP) for electricity supply (MBCP 2020). Refer below to Section 4.7.15, *Utilities and Service Systems*, for a discussion of electricity and fuel demand within the project area.

Energy use required for operation and maintenance (O&M) of the MWS includes electricity use at CalAm's office and operation center and fuel use for vehicles and repair equipment. Under project

conditions, energy use would occur by the District rather than by CalAm. However, the project does not entail any construction or land use changes that would result in an increase in energy use or in wasteful, inefficient, or unnecessary consumption of energy resources. Approximately 43 new residential connections would be annexed into the service area, but there would be no change in service for these connections and thus no expansion of energy use required to serve them. As described in Section 4.6, *Utilities and Service Systems*, the project would not substantially alter water demand in a manner that would increase energy use required to operate the MWS. As described in Section 4.5, *Transportation*, the project could result in an estimated increase of 177,180 VMT in and near the project area, which would consume approximately 10,183 gallons of gasoline per year (see Appendix B for calculations). This incremental increase in motor vehicle use would not substantially increase energy use associated with operation of the MWS. In addition, the existing CalAm office that would be acquired by the District is immediately adjacent to the David Avenue/#2875 bus stop for Monterey-Salinas Transit Route 2, which runs between Carmel and Pacific Grove, and Route 21, which is an express route that runs between Pebble Beach and Salinas. The office's proximity to this stop would provide opportunities for employees to use transit rather than personal automobiles, thereby reducing the potential for wasteful or unnecessary consumption of vehicle fuels. Furthermore, fuel consumed by District staff would be reduced over time as a result of California's increasingly stringent vehicle efficiency standards, and in the interest of cost efficiency, District staff would not utilize fuel in a manner that is wasteful or unnecessary. Therefore, the project would not conflict with or obstruct a plan for renewable energy or energy efficiency and would not result in wasteful or inefficient energy use. Energy impacts would be less than significant without mitigation.

4.7.6 Geology and Soils

Based on Appendix G of the *State CEQA Guidelines*, a significant impact would occur if implementation of the proposed project would result in any of the following conditions:

1. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving
    a. Rupture of a known earthquake fault, as delineated on the most recent Alquist Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
    b. Strong seismic ground shaking
    c. Seismic-related ground failure, including liquefaction
    d. Landslides
2. Result in substantial soil erosion or the loss of topsoil
3. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off site landslide, lateral spreading, subsidence, liquefaction or collapse
4. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property
5. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water
6. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature

The project area is located in a seismically active region in Monterey County. The San Andreas Fault traverses the eastern portion of the county. The San Andreas Fault system is the most active fault system in California. Additionally, the Palo Colorado – San Gregorio and Monterey Bay – Tularcitos fault zones occur closer to the shore in the vicinity of the project area (County of Monterey 2020). The area is prone to seismic ground shaking from earthquakes and associated geologic hazards such as landslides. Seismic ground shaking is an existing hazard for all structures in Monterey County.

Soils within the project area are complex and varied. The county contains 25 major soil associations and hundreds of soil series. Substantial soil concerns include soil loss from agricultural erosion, coastal erosion, and hillside development erosion (County of Monterey 2008c).

The proposed project would not involve construction, demolition, or land use changes that could result in increased exposure to geologic hazards. Acquisition of the MWS would not involve alteration of the system's use, and therefore would not affect the existing levels of exposure to geologic hazards. Nor would the project involve the use of septic systems or result in the potential to increase soil erosion or destroy a paleontological resource or geologic feature. There would be no impact related to geology and soils.

4.7.7 Hazards and Hazardous Materials

Based on Appendix G of the *State CEQA Guidelines*, a significant impact would occur if implementation of the proposed project would result in any of the following conditions:

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials
2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one quarter mile of an existing or proposed school
4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment
5. If located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area
6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires

Use, storage, and transport of hazardous materials within the project area includes typical activities within residential and commercial areas, such as the use and transport of fuels for construction activity and the presence of underground storage tanks. The former Fort Ord United States Army Base east of the city of Seaside contained leaking petroleum underground storage tanks, dump sites, and target ranges. The presence of hazardous waste at the former Fort Ord has been partially remediated to date (ToxicSites 2020). Additionally, the concentration of harmful polyfluoralkyl substances (PFAS) has been studied in the project area as a result of PFAS-containing foam being sprayed at the Monterey Regional Airport to extinguish a fire in 2007. A report by the Monterey Peninsula Airport District dated April 20 concluded that some contamination of groundwater had

occurred (Monterey Peninsula Airport District 2020). A coordinated response to this issue is ongoing.

O&M of the MWS involves the use of hazardous materials for activities such as water treatment and system repairs. Safe operation of the MWS is regulated by multiple agencies and laws, as described in Section 2, *Project Description*. These include the Safe Drinking Water Act, the State Water Resources Control Board, and the California Public Utilities Commission. The proposed transfer of ownership and boundary adjustment would not alter the current use of or exposure to hazardous materials, including PFAS, involved with O&M of the MWS. Nor would the project increase exposure to wildland fires, result in a safety hazard related to operation of an airport, or impair implementation of emergency response. There would be no impact.

4.7.8 Hydrology and Water Quality

Based on Appendix G of the *State CEQA Guidelines*, impacts to hydrology and water quality would be considered potentially significant if the proposed project would meet one of the following significance thresholds:

1. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality
2. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin
3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:
    a. result in substantial erosion or siltation on- or off-site;
    b. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
    c. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
    d. impede or redirect flood flows
4. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation
5. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan

Checklist items 2 and 5 regarding groundwater supplies are analyzed in Section 4.3, *Hydrology and Water Quality*. Checklist items 1, 3, and 4 are discussed below.

As described in Section 2.5, *Project Characteristics*, the proposed project would acquire all of CalAm's system facilities and related water rights but would not change or expand the physical MWS or the associated water rights, nor the operation and maintenance thereof.

Because the proposed project would not involve physical construction of new facilities or infrastructure and would not involve any substantial change in physical operational or maintenance activities, it would not create any new runoff water or stormwater discharge. The proposed project would also not alter the drainage pattern or flow velocity of stormwater at any site. As a result, the proposed project would not have any of the potential impacts associated with such changes, such as water quality impacts, erosion, or flooding. For the same reason, the proposed project would also

not expose people or structures to flooding or inundation, including from dam failure, tsunami, seiche or mudflow. No impact would occur and these issues do not require further analysis.

4.7.9 Land Use and Planning

Based on Appendix G of the *CEQA Guidelines*, a significant impact would occur if implementation of the proposed project would result in either of the following conditions:

1. Physically divide an established community
2. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect

Land use is varied within the multi-jurisdictional project area and includes residential, commercial, and open space land uses. The project area includes densely populated residential areas in the Monterey Peninsula and rural areas in the Carmel Valley, accounting for a total of approximately 40,000 customer connections.

The proposed project would affect water customers within the current MWS service area, which includes residents within the cities of Carmel-by-the-Sea, Del Rey Oaks, Monterey, Pacific Grove, Sand City, and Seaside, and unincorporated areas of Monterey County. The project includes a boundary adjustment to annex unincorporated portions of Monterey County into the proposed District jurisdictional boundary. The annexation areas are located east of the Monterey Peninsula, as shown in Figure 2-3 in Section 2, *Project Description*, and include approximately 43 residential connections. All customers served by the District would be subject to applicable District regulations and fees.

The following general plans and other plans are applicable to the proposed project:

- Carmel-by-the-Sea General Plan
- Del Rey Oaks General Plan
- City of Monterey General Plan
- Pacific Grove General Plan
- Sand City General Plan
- Seaside General Plan
- Monterey County General Plan
- Local Coastal Programs for Monterey County and the cities of Carmel-by-the-Sea, Monterey, Pacific Grove, Sand City, and Seaside
- Area Plans and Specific Plans throughout the project area

The plans listed above guide planning and development throughout the project area. The proposed project would not facilitate new development or population growth or conflict with other goals such as resource conservation or transportation planning. Therefore, the project would not conflict with or be inconsistent with any applicable plans. For specific goals and policies applicable to the proposed project, refer to the regulatory settings of Section 4.1 through 4.6.

While the project would transfer ownership of the MWS and adjust jurisdictional boundaries, there would be no changes in service or physical alterations that would divide an established community. The project would not influence or be influenced by zoning boundaries within any jurisdictions in the project area. The project does not include new roads or other physical changes that could result

in the physical division of an established community. Nor would the project conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The project would not require changes to zoning or land use and would not inhibit or modify land use within any of the affected jurisdictions. The project would have no impact related to land use and planning.

4.7.10 Mineral Resources

Based on Appendix G of the *State CEQA Guidelines*, a significant impact would occur if implementation of the proposed project would result in either of the following conditions:

1. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state
2. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan

The Monterey County General Plan Conservation and Open Space Element notes that although the county contains useful minerals, geological complexity caused by faulting and deformation makes further investigation difficult and inconclusive (County of Monterey 2010). The Monterey County General Plan and the general plans for the cities of Carmel-by-the-Sea, Del Rey Oaks, Monterey, Pacific Grove, Sand City, and Seaside do not identify any specific mineral resources or mineral sites with economic potential from mineral extraction (County of Monterey 2010; City of Carmel-by-the-Sea 2010; City of Del Rey Oaks 1997; City of Monterey 2016; City of Pacific Grove 1994; City of Sand City 2002; City of Seaside 2003).

The proposed project would not involve mineral extraction, construction, or changes in land use that could affect the availability of mineral resources. Therefore, there would be no impact to mineral resources.

4.7.11 Population and Housing

Based on Appendix G of the *State CEQA Guidelines*, a significant impact would occur if implementation of the proposed project would result in either of the following conditions:

1. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)
2. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere

According to estimates for 2020 by the Association of Monterey Bay Area Governments (AMBAG), Monterey County is home to an estimated 448,000 residents, with 105,000 residing in unincorporated land. Resident totals in the cities affected by the proposed project include 3,833 in Carmel-by-the-Sea, 1,949 in Del Rey Oaks, 28,726 in the city of Monterey, 15,349 in Pacific Grove, 544 in Sand City, and 34,301 in Seaside (AMBAG 2018).

The project area includes the area served by the MWS, which contains approximately 40,000 customer connections. The proposed project would involve the transfer of ownership and operation of the MWS from CalAm to the District. As described in Section 2, *Project Description*, the District would operate the MWS from the same facilities with a similar number of employees (an estimated increase in six District employees and six CalAm employees, for a net increase of approximately 12

employees) as the current CalAm operations. As stated throughout this EIR, given the nature of these employment opportunities, it is likely that these employees would be drawn from the existing workforce in Monterey County. However, even if these employees were to come from out of the area, and thus would be new residents of Monterey County, two additional positions would not constitute substantial population growth. Therefore, the project would not result in new employment opportunities that could contribute to regional population growth. Nor does the project involve new housing or other physical changes that could result in population growth, or changes to the water supply or distribution system. Therefore, the proposed project would not induce substantial unplanned population growth or displace existing people or housing. There would be no impact related to population and housing.

4.7.12 Public Services

Based on Appendix G of the *State CEQA Guidelines*, a significant impact would occur if implementation of the proposed project would result in any of the following conditions:

1. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:
    a. Fire protection
    b. Police protection
    c. Schools
    d. Parks
    e. Other public facilities

The cities of Carmel-by-the-Sea, Del Rey Oaks, Monterey, Pacific Grove, Sand City, and Seaside each have a city police department, while Monterey County is served by the Monterey County Sheriff's Office. The Seaside Fire Department provides service to the cities of Seaside and Del Rey Oaks; the Monterey City Fire Department provides service to the cities of Monterey, Carmel-by-the-Sea, Pacific Grove, and Sand City; and unincorporated Monterey County is served by the Monterey County Regional Fire District. Various municipal and regional districts serve the project area with provision of schools, parks, libraries, and other public services and facilities.

The project does not propose changes to the provision or facilities of public services. Nor would the project result in a change in population that could impact service ratios for public services, because the project does not entail any new housing, employment opportunities, or land use changes. Therefore, the project would not have the potential to result in the need for new or expanded facilities for public services. There would be no impact on public services.

4.7.13 Recreation

Based on Appendix G of the *State CEQA Guidelines*, a significant impact would occur if implementation of the proposed project would result in either of the following conditions:

1. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated

2. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment

The project area is served by various regional, county, and municipal parks, such as Laguna Grande Regional Park in Monterey/Seaside and El Estero Park in Monterey. Various large open space areas in the Big Sur region to the south and the Carmel Valley to the east are also available to residents within the project area.

The project does not involve the addition, removal, or alteration of any recreation facilities. The project would not result in an increase in population or involve any land use changes that could impact the use of recreation facilities. The project would have no impact on recreation.

4.7.14 Tribal Cultural Resources

Based on Appendix G of the *State CEQA Guidelines*, a significant impact would occur if implementation of the proposed project would result in any of the following conditions:

1. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
    a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
    b. a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

The Ohlone Costanoan Esselen Nation represents over 600 enrolled tribal members of Esselen, Carmeleno, Monterey Band, Rumsen, Chalon, Soledad Mission, San Carlos Mission, and Costanoan Mission Native American descent from the Monterey Bay region (Ohlone Costanoan Esselen Nation 2020). As described above in Section 4.7.4, *Cultural Resources*, most of the project area is rated "moderate" or "low" for archaeological sensitivity. Previous archaeological research within the project area has revealed sites of potential archaeological value related to Native American history, such as sites along the northern shore of the Monterey Peninsula related to the presence of the Costanoan Tribe (City of Monterey 2004).

Assembly Bill 52 (AB 52) requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified by lead agencies of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated. Pursuant to AB 52, the District sent letters to tribal representative on April 6, 2020 informing them of the project. No requests for further consultation were received within the 30-day scheduling period that ended on May 6, 2020. However, as part of the State of California's response to the COVID-19 pandemic, Executive Order N-54-20 suspended the timeframes in which a California Native American Tribe is required to request consultation. Follow-up letters were therefore sent to tribal representatives on May 22, 2020. In addition, on May 28, 2020, District staff made telephone calls or emails (where no phone number was available) to the tribal leaders who received consultation letters. The following outlines the responses received; this correspondence is also documented in Appendix C:

- On April 19, 2020 Valentin Lopez, Chair of the Amah Mutsun Tribal Band, noted via email that the project was outside their traditional tribal territory and they had no comment.
- An email reply was received on May 23, 2020 from Karen White of the Xolon Salinan Tribe noting that the Xolon Salinan Tribe considers a portion of the project area to be within the tribe's aboriginal territory. However, as the project would not result in ground disturbance, no further consultation was requested.
- On May 28, 2020, Irene Swierlein of the Amah Mutsun Tribal Band of Mission San Juan Bautista had questions for District staff about the project. David Stoldt, District General Manager, called Ms. Swierlein on May 29, 2020 to discuss her questions.
- On June 3, 2020, Rudolph Rosales, Indigenous Peoples Consultant for the Ohlone/Costanoan Esselen Nation, noted they had not received either letter sent to the contact listed under the NAHC and further expressed interest in consultation. The letter was forwarded to their email directly with contact information to follow-up with the District for consultation, if necessary.
- The District sent another followed-up email Mr. Rosales on June 5, 2020; as of June 11, 2020, no further response or request for consultation has been made from Mr. Rosales or any other representative of the Indigenous Peoples Consultant for the Ohlone/Costanoan Esselen Nation.

No other tribal leaders have responded as of the date of this writing.

The project would not involve any construction or demolition activity that would require ground disturbance. Therefore, there would be no potential to disturb or unearth previously unknown resources of tribal cultural significance. There would be no impact on tribal cultural resources.

4.7.15 Utilities and Service Systems

Based on Appendix G of the *State CEQA Guidelines*, a significant impact would occur if implementation of the proposed project would result in either of the following conditions:

1. Require or result in the construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects
2. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years
3. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments
4. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals
5. Comply with federal, state, and local statutes and regulations related to solid waste

Checklist items 2 and 3 and checklist item 1 as it pertains to water, wastewater, and stormwater drainage are analyzed in Section 4.6, *Utilities and Service Systems*. Items 4 and 5 and item 1 as it pertains to electric power, natural gas, and telecommunications facilities are discussed below.

Electricity and Natural Gas

MBCP sources carbon-free electricity to provide to Monterey County customers. MBCP provides carbon-free and renewable electricity to serve 97 percent of the electricity load within its jurisdiction that covers Monterey, San Benito and Santa Cruz counties as well as San Luis Obispo and

Morro Bay. In 2018, MBCP sourced 66 percent of its electricity from hydroelectric and 34 percent from renewable sources such as geothermal, solar, wind, and biomass and biowaste (MBCP 2020).

PG&E owns the electricity infrastructure and provides natural gas in the project area. In 2018, Monterey County's electricity usage was 2,509 kilowatt-hours and natural gas demand was 112 million therms (California Energy Commission 2020a and 2020b).

The proposed project would not involve physical construction of facilities or infrastructure and would not involve any change in physical operation or maintenance activities. As a result, the proposed project would not require any new or expanded electric power, natural gas, or telecommunication infrastructure. Therefore, there would be no impact related to electric power, natural gas, or telecommunication infrastructure.

Solid Waste

The proposed project area is served by the Monterey Regional Waste Management District (MRWMD). MRWMD operates facilities on its 475-acre property, two miles north of Marina, sharing a site with the Monterey One Water Regional Treatment Plant. The property includes the 315-acre Monterey Peninsula Landfill and a 126-acre buffer area. The facility is permitted to receive a maximum of 3,500 tons of waste per day. The current daily intake is approximately 1,300 tons per day, with a per person rate of six pounds daily (MRWMD 2016). As a result, the remaining daily intake capacity at the facility is 2,200 tons. Monterey Peninsula Landfill is not projected to reach capacity until the year 2115.

As described above, the proposed project would not involve physical construction or increase the size of the existing water system. Therefore, the project itself would not result in an increase in solid waste generated by operation of the water supply system. In addition, the proposed project is not expected to result in direct or indirect population growth and would not increase solid waste generation. As such, impacts related to solid waste would be less than significant.

4.7.16 Wildfire

Based on Appendix G of the *State CEQA Guidelines*, a significant impact would occur if the project would be located in or near State Responsibility Areas or lands classified as very high fire hazard severity zones, and would result in any of the following conditions:

1. Substantially impair an adopted emergency response plan or emergency evacuation plan
2. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire
3. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment
4. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage change

Portions of the project area are located within State Responsibility Areas classified as high or very high for fire hazard severity. Much of the southern and western portions of the Monterey Peninsula as well as areas within the Carmel Valley are within State Responsibility Areas classified as high or very high for fire hazard severity, while the northern and eastern portions of the Monterey Peninsula and the coastal land to the north and the inland land north of SR 68 are Local

Responsibility Areas (California Department of Forestry and Fire Protection 2007). Wildfire hazards are of high concern in the region, particularly in forested areas in the Big Sur region and the Carmel Valley. Since 1999, Monterey County has experienced 15 large (300-acre or greater) wildland fires. These do not include the 25,000 acres burned annually from wildland fires in Los Padres National Forest. Most recently, the 2016 Soberanes Fire, which started as an illegal campfire in Garrapata State Park in Monterey County, burned a total of 121,050 acres (Monterey County Office of Emergency Services 2019).

The project does not involve construction or land use changes that could expose people or structures to wildfire hazards. Wildfire hazards are prevalent throughout the project area, but the proposed project would not exacerbate existing risks. The project would not alter the need for infrastructure associated with wildfire, such as roads or fuel breaks. Nor would the project affect traffic patterns or volume in a manner that could impair emergency response. Therefore, the project would have no impact related to wildfire.

5 Other CEQA Required Discussions

This section discusses growth-inducing impacts and irreversible environmental impacts that would be caused by the proposed project.

5.1 Growth Inducement

Section 15126(d) of the *State CEQA Guidelines* requires a discussion of a proposed project's potential to foster economic or population growth, including ways in which a project could remove an obstacle to growth. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects if it requires new development or infrastructure to support it. The proposed project's growth-inducing effects would be considered significant if they could result in significant physical effects in one or more environmental resource areas. The most commonly cited example of how an economic effect might create a physical change is where economic growth in one area could create blight conditions elsewhere by causing existing competitors to go out of business and the buildings to be left vacant.

5.1.1 Economic and Population Growth

As discussed in Section 2, *Project Description*, the proposed project involves the Monterey Peninsula Water Management District's (District) acquisition of the Monterey water system (MWS), annexation of connections supported by the MWS into the District, as well as the operation and maintenance of the MWS by the District. These actions in and of themselves would not directly have any economic or growth-inducing effects, as they would not alter the area or number of customers served by the water system. However, one of the objectives of the proposed project is to provide greater local control over the water rate-setting process in order to control the pace of future rate increases. It could be argued that if long-range rates and rate increases are reduced, customers within the MWS would save money and be able to spend that money in other ways, thus producing a beneficial impact on the local economy. However, the proposed project would not change zoning or land use designations or provide new facilities that would accommodate an increased population; therefore, the project would not induce substantial population growth, as already determined in Section 4.7, *Effects Found Less Than Significant*.

Section 4.7, *Effects Found Less Than Significant*, also concluded that the potential for the proposed project to result in a substantial change in employment within the District or surrounding areas beyond employment already provided by CalAm would be minimal because no new facilities would be developed as part of the project. The District would offer employment to approximately 77 of the 81 existing staff CalAm staff associated with the MWS and would add approximately 10 additional positions in District administration related to billing, finance, and customer service.[1] In total, there would be approximately 87 employees hired by the District associated with the MWS, which would be a net increase of approximately six employees as compared to existing conditions

[1] It is possible that some of the 77 existing CalAm employees who are offered employment by the District would instead pursue employment opportunities at CalAm or another employer or retire. In these events, the District would hire other employees to fill the open positions. Given the nature of these employment opportunities, it is likely that non-CalAm employees that would be hired by the District currently live in the Monterey Peninsula area. Regardless, the key metric for this analysis is the number of net new employees hired by the District after acquisition of the MWS, which would be six.

(87 District employees – 81 existing CalAm employees). In addition, this analysis conservatively assumes that CalAm would hire approximately six additional employees to operate and maintain the Central Satellites (e.g., one meter reader/utility worker, two operators, and three field crew).[2] As a result, this analysis assumes the project would result in a net increase of approximately 12 employees (approximately 6 District employees + approximately 6 CalAm employees). As stated in Section 4.7.11, *Population and Housing,* it is likely these employees would be drawn from the existing workforce in Monterey County. However, even if these employees were to come from out of the area, and thus would be new residents of Monterey County, 12 additional positions would not constitute substantial population growth. Therefore, the project would not introduce substantial population growth as a result of employment opportunities and there would be no impact.

5.1.2 Removal of Obstacles to Growth

As discussed above, the proposed project involves the District's acquisition of the MWS, annexation of connections supported by the MWS into the District, and subsequent operation and maintenance of the water system by the District. As discussed in Section 4.6, *Utilities and Service Systems*, no expansion of the water system facilities is proposed and thus the project would not induce growth that would not otherwise occur in areas not previously served by municipal water supplies.[3] While one of the project objectives is to provide greater local control over the rate setting process and rate increases, that does not necessarily translate into higher usage and demand because there are other regulatory controls in place that encourage users to conserve water, as discussed in Sections 4.3, *Hydrology and Water Quality*, and 4.6, *Utilities and Service Systems*. Further, conservation of water is an objective of the project and is directly addressed in the Measure J purpose statement, which states "…to promote and practice sustainable water management measures…"

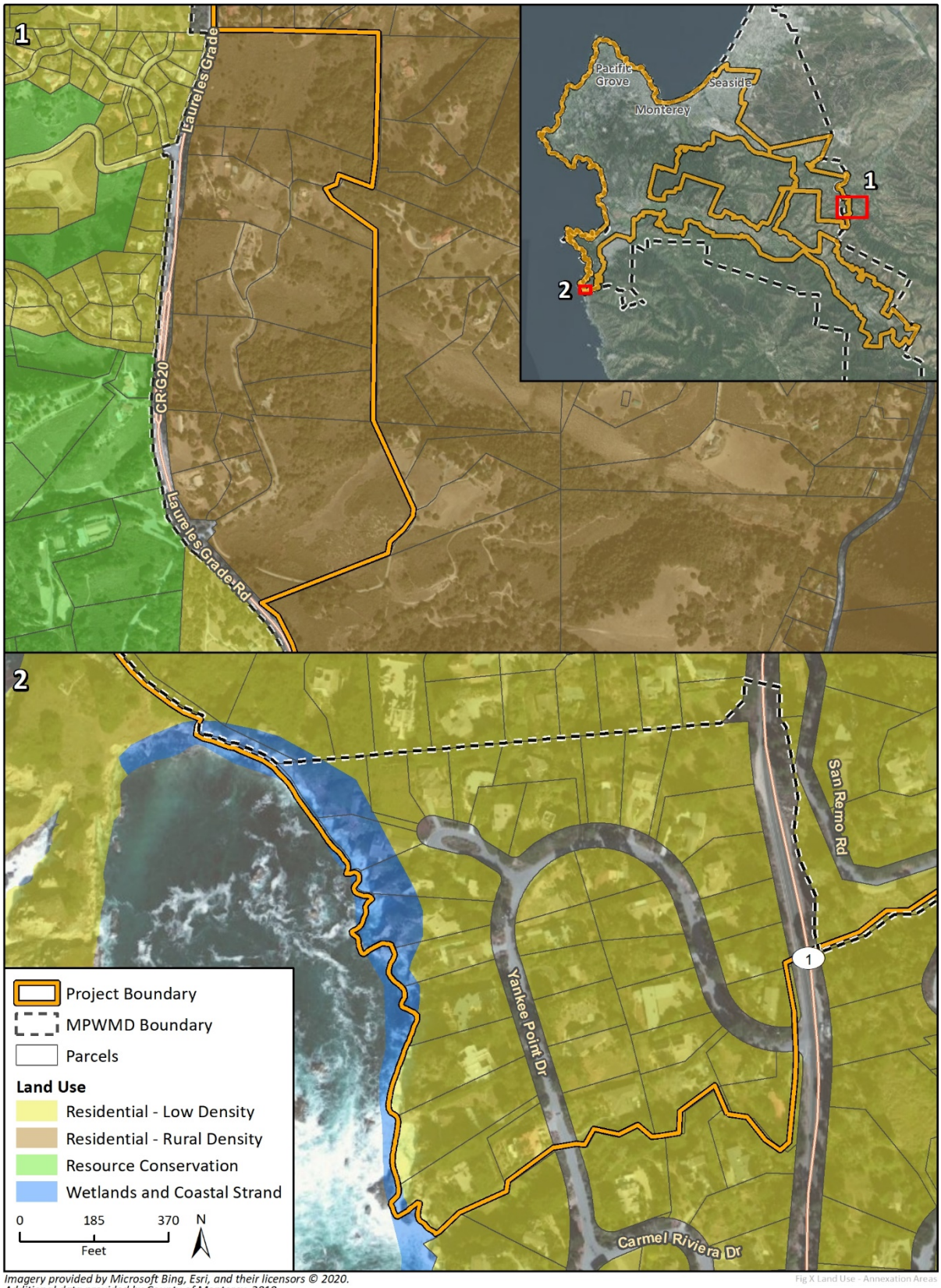
In addition, extension of the District boundaries to serve areas outside the District would not remove an obstacle to growth as these areas are already served by CalAm and the District would only be replacing that service. The areas proposed for annexation are designated by the Monterey County 2010 General Plan as residential and would not include lands designated for open space or agricultural uses. Further, as shown in Figure 5-1, a majority of the parcels at Yankee Point are already built-out. There are some vacant parcels in Hidden Hills that are designated rural residential however, the District does not have land use authority and thus would not approve new development. Notwithstanding existing connections, there is currently a constraint to future development in these areas due water availability; however, changing the service provider in these areas from private to public through an annexation would not enable new development which would otherwise be unable to proceed. Therefore, annexation of these areas into the District would not allow additional development or vacant lots to be developed any differently than without annexation. Any future development would be subject to local jurisdiction land use controls and would require CEQA clearance, permitting, and any other required approvals.

As described in Sections 4.1 through 4.7 of this EIR, environmental impacts resulting from the proposed project have been determined to be less than significant or less than significant with

[2] Although this scenario is possible, it is also possible that CalAm would utilize existing employees to operate and maintain the Central Satellites rather than hiring additional employees. As such, this is a conservative assumption for the purposes of analysis.

[3] Potential growth inducing impacts related to planned facilities, including the Monterey Peninsula Water Supply Project (MPWSP), were addressed in their respective environmental documents. As stated throughout, this EIR does not analyze impacts associated with construction or operation of the MPWSP and its 6.4 MGD Desalination Plant, which was already reviewed and approved by the CPUC as part of the MWPSP EIR/EIS.

Figure 5-1 Land Use Designation within Proposed Annexation Areas



Imagery provided by Microsoft Bing, Esri, and their licensors © 2020.
Additional data provided by County of Monterey, 2010.

Fig X Land Use - Annexation Areas

mitigation. The proposed project would not induce growth or remove any obstacles to growth because it would not require new or expanded facilities, such as water or wastewater treatment plants, or require procurement of additional water supplies beyond what is currently occurring under the existing ownership. The proposed project would therefore not result in any significant effect related to removing obstacles to growth.

5.2 Irreversible Environmental Effects

The *State CEQA Guidelines* require that EIRs reveal the significant environmental changes that would occur as a result of a proposed project. CEQA also requires decision-makers to balance the benefits of a project against its unavoidable environmental risks in determining whether to approve a project. This section addresses non-renewable resources, the commitment of future generations to the proposed uses, and irreversible impacts associated with the project.

The proposed project would not require construction of new or expanded water treatment or distribution facilities. As part of the proposed project, employees engaged in operation and maintenance of the water system would be based out of the existing CalAm facilities with some staff located at the District's existing administrative building.

The District would operate the MWS with a similar number of employees (an estimated increase of approximately six District employees as the current CalAm operations, and CalAm would hire approximately six additional employees to operate and maintain the Central Satellites for a total net increase of approximately 12 employees (approximately six District employees + approximately six CalAm employees). Expansion of facilities or staff to accommodate operational activities is not anticipated; therefore, the use of more than minor amounts of building materials and energy, some of which are non-renewable resources, would not occur. Increasingly efficient building fixtures and automobile engines are expected to offset any incremental increase in demand for non-renewable energy resources, such as petroleum and natural gas, which could result due to the presence of additional employees at the operation and maintenance facility, in the unlikely event that is required. As further discussed below, it is not anticipated that the proposed project would significantly affect local or regional energy supplies.

As described in Section 4.5, *Transportation*, the water system would be operated out of the existing CalAm facilities with the exception of a few staff at the existing District administrative building. However, there would be little to no change in the length, distribution, or number of vehicle trips required to commute to the District administrative building or to operate and maintain the system. Further, the increase in vehicle miles traveled associated with the Central Satellites would be incremental and impacts would be less than significant. As discussed in Section 4.1, *Air Quality*, the proposed project would not result in an increase in air emissions from operation and maintenance activities. As discussed in Section 4.4, *Noise*, no increased noise levels from traffic noise associated with the proposed project would occur or expose sensitive receptors to noise levels exceeding applicable standards. No noise impacts related to additional vehicle trips would occur.

5.3 Significant and Unavoidable Effects

The analysis contained in this EIR did not identify any significant and unavoidable impacts resulting from the proposed project. However, the proposed project would result in significant but mitigatable impacts for greenhouse gas emissions.

6 Alternatives

As required by Section 15126.6 of the *State CEQA Guidelines*, this Environmental Impact Report (EIR) examines a range of reasonable alternatives to the proposed project, or the location of the proposed project, that would attain most of the basic project objectives but would avoid or substantially lessen the significant adverse impacts.[1] In accordance with the *State CEQA Guidelines*, an EIR also shall describe the comparative merits of the alternatives. Section 15126.6(f) further states that "the range of alternatives in an EIR is governed by the 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." The analysis in this section focuses on those alternatives capable of reducing the potential environmental effects of the proposed project even if they would impede the attainment of some project objectives or be more costly. The EIR also analyzes the specific alternative of "no project" and its potential environmental effects. In accordance with Section 15126.6(f)(1), among the factors that may be taken into account when addressing the feasibility of alternatives are: (1) site suitability; (2) economic viability; (3) availability of infrastructure; (4) general plan consistency; (5) other plans or regulatory limitations; (6) jurisdictional boundaries; and (7) whether the proponent can reasonably acquire, control or otherwise have access to the alternative site. An EIR need not consider an alternative when the effect cannot be reasonably ascertained and the implementation is remote and speculative.

As required by the California Environmental Quality Act (CEQA), this section also includes a discussion of the "environmentally superior alternative" among those studied.

6.1 Development of Alternatives

Project alternatives considered were evaluated for their potential feasibility, their ability to achieve most of the proposed project's objectives, and their ability to reduce significant environmental effects. The following section provides an overview of proposed project's objectives and identified significant impacts.

This section also presents the specific alternatives that were suggested during the scoping process and alternatives developed by the Monterey Peninsula Water Management District (District) to reduce potentially significant impacts, respond to responsible agency recommendations, and meet CEQA requirements.

6.1.1 Project Objectives

As discussed in Section 2, *Project Description*, the underlying purpose of the proposed project is for the District to acquire, operate, and maintain California American Water's (CalAm's) Monterey Water System (MWS). The objectives of the proposed project are to implement the purpose approved by the electorate in Measure J:

> "…to ensure the long-term sustainability, adequacy, reliability, cost-effectiveness and quality of water service within the Monterey Peninsula Water Management District area, to lower the

[1] As previously stated, environmental impacts from construction of the Monterey Peninsula Water Supply Project (MPWSP) Desalination Plant were analyzed under a separate environmental review process, the MPWSP Environmental Impact Report/Environmental Impact Statement (EIR/EIS). It is important to note that this EIR does not analyze impacts associated with construction or operation of the MPWSP Desalination Plant, which was already reviewed and approved by the California Public Utilities Commission (CPUC) as part of the MWPSP EIR/EIS. As such no alternatives to the MPWSP Desalination Plant are considered herein.

cost of service to ratepayers, to promote and practice sustainable water management measures, and to establish public ownership of water system assets by establishing regulations requiring the District to take affirmative action, to the extent financially feasible, to acquire the water system assets owned and operated by the California American Water Company that currently provide water service to the District and its ratepayers."

The purpose of Measure J furthered by this proposed project shall include the following aspects:

- Allow the citizens of the Monterey Peninsula to independently own and operate the water production and distribution system serving customers presently served by the CalAm's MWS;
- Provide greater transparency and accountability to residents and businesses on the Monterey Peninsula regarding potable water supplies, as well as increased customer service and reliability;
- Enhance customer service and responsiveness to affected CalAm customers;
- Provide greater local control over the rate setting process and rate increases;
- Provide direct access to locally elected policy makers for water operations;
- Allow the District to pursue funding and other financing alternatives available to public agencies for future infrastructure needs, including grants and financing options not available to a California Public Utilities Commission (CPUC)-regulated, privately-owned utility; and,
- Ensure better coordination amongst local governmental decisions involving land use, emergency services, policy, the location and need for capital improvements, and overall planning in the water context.

6.2 Significant Environmental Effects

The evaluation of environmental impacts in Chapter 4, *Environmental Impact Analysis*, concludes that the proposed project would not result in temporary or permanent significant and unavoidable effects for any of the environmental issue areas identified in Appendix G of the *State CEQA Guidelines*. However, a range of feasible alternatives to the proposed project was developed to provide additional information and flexibility to the decision-makers when considering the proposed project.

6.3 Alternative Considered but Rejected

This section describes the alternative that was considered but eliminated from further evaluation. The alternative considered was evaluated for its potential feasibility, ability to achieve most of the project objectives, and ability to reduce project impacts.

6.3.1 District Acquires All Assets Alternative

Under this alternative the District would acquire the CalAm water system, but the physical area of the acquisition would be larger. This alternative includes the District acquiring all of CalAm's water supply system in Monterey County, including the MWS, the Central Satellites, and the Monterey Wastewater facilities and associated assets, including water and wastewater systems and production wells; utility plants; vehicles and equipment; water rights; water supply and wastewater contracts; records, books, and accounts; and, easements, and rental property. Under this alternative the District would still acquire any planned facilities, such as the MPWSP Desalination Plant. In addition, under this alternative the District's boundary adjustment would be larger. Specifically, the

District's annexation would be extended to not only cover Yankee Point and Hidden Hills, but would also include Ralph Lane, Ambler Park, Toro, Chualar, and Garrapata located in unincorporated Monterey County.

This alternative was rejected from further consideration because it does not meet the objectives of the project, which are to implement the purpose approved by the electorate in Measure J. As restated previously, this includes public ownership of water system assets, not wastewater assets. Further, the Monterey Peninsula Water Management District's mission is to promote or provide for a long-term sustainable water supply, and to manage and protect water resources for the benefit of the community and the environment. The District does not currently operate or manage any wastewater systems. Because this alternative would overstep the purpose of Measure J as well as overstep the mission of the District, this alternative was rejected from detailed consideration herein.

6.4 Alternatives Evaluated in Draft EIR

This section describes the following four alternatives that are included for more detailed consideration and evaluation in the Draft EIR, based on meeting most of the basic project objectives and reducing potentially significant impacts:

- Alternative 1: No Project Alternative
- Alternative 2: No Boundary Adjustment Alternative
- Alternative 3: Private Third-Party Operator Alternative
- Alternative 4: No Boundary Adjustment and Private Third-Party Operator Alternative

Table 6-1 lists the project objectives and identifies whether or not each of the alternatives meets the project objectives. Table 6-2 provides a comparison of the alternatives' characteristics relative to the proposed project.

Table 6-1 Project Objectives and Alternatives Evaluated in Draft EIR

	Alternative 1: No Project	Alternative 2: No Boundary Adjustment Alternative	Alternative 3: Private Third-Party Operator Alternative	Alternative 4: No Boundary Adjustment and Private Third-Party Operator Alternative
Ensure the long-term sustainability, adequacy, reliability, cost-effectiveness and quality of water service within the Monterey Peninsula Water Management District area, lower the cost of service to ratepayers, promote and practice sustainable water management measures, and establish public ownership of water system assets by establishing regulations requiring the District to take affirmative action, to the extent financially feasible, acquire the water system assets owned and operated by the California American Water	Not consistent with project objective	Consistent for areas within the District boundary, not consistent for proposed annexation areas	Consistent with project objectives*	Consistent for areas within the District boundary,* not consistent for proposed annexation areas

	Alternative 1: No Project	Alternative 2: No Boundary Adjustment Alternative	Alternative 3: Private Third-Party Operator Alternative	Alternative 4: No Boundary Adjustment and Private Third-Party Operator Alternative
Company that currently provide water service to the District and its ratepayers.				
Allow the citizens of the Monterey Peninsula to independently own and operate the water production and distribution system serving customers presently served by the CalAm's MWS	Not consistent with project objective	Consistent for areas within the District boundary, not consistent for proposed annexation areas	Consistent with project objectives	Consistent for areas within the District boundary, not consistent for proposed annexation areas
Provide greater transparency and accountability to residents and businesses on the Monterey Peninsula regarding potable water supplies, as well as increased customer service and reliability	Not consistent with project objective	Consistent for areas within the District boundary, not consistent for proposed annexation areas	Consistent with project objectives	Consistent for areas within the District boundary, not consistent for proposed annexation areas
Enhance customer service and responsiveness to affected CalAm customers	Not consistent with project objective	Consistent for areas within the District boundary, not consistent for proposed annexation areas	Consistent with project objectives	Consistent for areas within the District boundary, not consistent for proposed annexation areas
Provide greater local control over the rate setting process and rate increases	Not consistent with project objective	Consistent for areas within the District boundary, not consistent for proposed annexation areas	Consistent with project objectives*	Consistent for areas within the District boundary,* not consistent for proposed annexation areas
Provide direct access to locally elected policy makers for water operations	Not consistent with project objective	Consistent for areas within the District boundary, not consistent for proposed annexation areas	Consistent with project objectives	Consistent for areas within the District boundary, not consistent for proposed annexation areas

	Alternative 1: No Project	Alternative 2: No Boundary Adjustment Alternative	Alternative 3: Private Third-Party Operator Alternative	Alternative 4: No Boundary Adjustment and Private Third-Party Operator Alternative
Allow the District to pursue funding and other financing alternatives available to public agencies for future infrastructure needs, including grants and financing options not available to a California Public Utilities Commission (CPUC)-regulated, privately-owned utility	Not consistent with project objective	Consistent for areas within the District boundary, not consistent for proposed annexation areas	Consistent with project objectives	Consistent for areas within the District boundary, not consistent for proposed annexation areas
Ensure better coordination amongst local governmental decisions involving land use, emergency services, policy, the location and need for capital improvements, and overall planning in the water context	Not Consistent with Project Objective	Consistent for areas within the District boundary, not consistent for proposed annexation areas	Consistent with Project Objectives	Consistent for areas within the District boundary, not consistent for proposed annexation areas

*The alternative would meet the objective but to a lesser extent than the proposed project.

Table 6-2 Proposed Project and Alternatives Characteristics

Feature	Proposed Project	Alternative 1: No Project	Alternative 2: No Boundary Adjustment Alternative	Alternative 3: Private Third-Party Operator Alternative	Alternative 4: No Boundary Adjustment and Private Third-Party Operator Alternative
Project Area (square miles)	55	–	52.8	55	52.8
Service Agreement	District	CalAm	District under contract for annexation areas	District	District under contract for annexation areas
Operation and Maintenance performed by	District	CalAm	District	Third-party operator	District
Annexation included	Yes	No	No	Yes	No

The evaluation in this section includes all environmental topics addressed in Sections 4.1 to 4.7 and Chapter 5, although at a more general level to compare the merits of the alternatives to the proposed project, as allowed by CEQA (Guidelines 15126.6[d]). Table 6-3, located at the end of this chapter, presents a comparison of the impacts of the proposed project to the impacts of each of the alternatives.

6.4.1 Alternative 1: No Project Alternative

Description

CEQA requires analysis of a No Project alternative (Alternative 1) to allow decision makers to compare the impacts of approving a project with the impacts of not approving a project (*CEQA Guidelines* Section 15126.6[e]). The no-project analysis must discuss the existing conditions at the time the Notice of Preparation is published, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure.

As such, Alternative 1 (No Project Alternative) assumes that the proposed acquisition of the MWS by the District would not occur. Specifically, the District would not acquire CalAm's Main, Bishop, Hidden Hills, and Toro water components of the MWS and associated assets, including water systems and production wells; utility plants; vehicles and equipment; water rights; water supply contracts; records, books, and accounts; and, easements, and rental property. In addition, since the District would not acquire the MWS, a boundary adjustment to annex service areas into the District would not be necessary and, therefore, would not occur under Alternative 1. Under this alternative, CalAm would continue to operate and maintain the MWS from its existing facilities, including the construction and operation of the MPWSP Desalination Plant.[2]

The No Project Alternative would not achieve any of the project objectives because it would not allow the District to implement the purpose approved by the electorate in Measure J. Specifically, the No Project Alternative would not allow the citizens of the Monterey Peninsula to independently own and operate the water production and distribution system serving customers presently served by the CalAm's MWS; provide greater transparency and accountability to residents and businesses on the Monterey Peninsula regarding potable water supplies, as well as increased customer service and reliability; enhance customer service and responsiveness to affected CalAm customers; provide greater local control over the rate setting process and rate increases; provide direct access to locally elected policy makers for water operations; allow the District to pursue funding and other financing alternatives available to public agencies for future infrastructure needs, including grants and financing options not available to a CPUC-regulated, privately-owned utility; or ensure better coordination amongst local governmental decisions involving land use, emergency services, policy, the location and need for capital improvements, and overall planning in the water context.

Impact Analysis

The No Project Alternative would avoid all of the less than significant environmental impacts associated with the proposed project and would maintain the current ownership and operational regime for the MWS. In reality, the less than significant impacts related to air quality, noise, and transportation under the proposed project would not occur (i.e. the same as under existing conditions, the No Project Alternative) since no change in operation or maintenance activities would occur.

Specifically, impacts due to air quality and greenhouse gas (GHG) emissions that would result from potential net increases in daily vehicle trips and vehicle miles traveled (VMT) under the proposed project would not occur, resulting in lesser impacts compared to the proposed project. The proposed project would require mitigation to reduce impacts due to GHG emissions to a less-than-

[2] If approved by the National Environmental Protection Agency lead agency, the Monterey Bay National Marine Sanctuary.

significant level. Because this alternative would not increase vehicle trips and VMT, this potentially significant impact would be eliminated, and no mitigation would be required.

Because the No Project Alternative would not increase trips or VMT, transportation and noise impacts would not occur. These impacts, which would be less than significant for the proposed project, would be eliminated.

The proposed project would not induce growth because it would not require new or expanded facilities, such as water or wastewater treatment plants, or require procurement of additional water supplies beyond what is currently occurring under the existing ownership. Further, since annexation areas are already served by CalAm, the proposed project would not remove any obstacles to growth. The No Project Alternative would have similar impacts related to growth inducement, since there would be no alternations to the MWS. Therefore, both the No Project Alternative and the proposed project would have no impact.

Finally, under the No Project Alternative the setting of water rates would remain the responsibility of CalAm as regulated by the CPUC. Conservatively assuming rates stay the same or increase over time as has been the trend in the area, no potential increase in demand on groundwater or surface water supplies would occur due to rate alterations. The No Project Alternative would have similar impacts related to hydrology and water quality as well as utilities and service systems, since water use would not change as a result of the proposed project. Therefore, both the No Project Alternative and the proposed project would have less than significant impacts.

Overall, environmental impacts would be reduced for the No Project Alternative compared to the proposed project.

6.4.2 Alternative 2: No Boundary Adjustment Alternative

6.4.2.1 Description

Alternative 2 (No Boundary Adjustment Alternative) assumes that the proposed acquisition of the MWS by the District would proceed but that the application to annex areas outside of the District's boundaries would not be approved by the Local Agency Formation Commission of Monterey County (LAFCO). Instead, the District's boundaries would remain the same. Areas outside of the District's boundaries that would be annexed under the proposed project - including approximately 33 residential connections within the Main component of the MWS in the Yankee Point area and approximately 10 residential connections in the Hidden Hills component of the MWS - would still be acquired from CalAm by the District under this alternative. However, rather than through an annexation, service by the District would occur under a contract agreement with property owners, likely through a Homeowner's Association (HOA) or similar entity, or some other contract mechanism.[3]

As a result, operation and maintenance of these areas outside the District would be the same as described under Section 2, *Project Description,* but the governance structure would be different. Whether the areas outside of the District are annexed or not, neither the proposed project nor this alternative would result in physical construction of facilities or infrastructure and would not involve any change in physical operation or maintenance activities.

[3] An example of this type of agreement includes Sleepy Hollow subdivision and Hitchcock Canyon neighborhood, both located in Carmel Valley, where CalAm has a master meter within its service area boundary serving each neighborhood, but both neighborhoods are outside CalAm's service territory boundary.

Although under Alternative 2 the acquisition would still proceed and the District would own the system within its service area and provide water to nonannexed areas through a contract agreement, these proposed annexation areas would still be considered outside the District and therefore would not have any representation within the District. Customers outside the District boundaries would not be allowed to vote for District Board of Directors and these customers would not have direct contact through their municipal elected officials as they would if they were annexed within the District. As a result, Alternative 2 would not fully realize project objectives because it would not allow the District to fully implement the purpose approved by the electorate in Measure J. Specifically, Alternative 2 would not allow the citizens outside the District to independently own and operate the water production and distribution system serving customers presently served by the CalAm's MWS. Further, Alternative 2 would not meet the following objectives for citizens outside the District boundaries: provide direct access to locally elected policy makers for water operations; allow the District to pursue funding and other financing alternatives available to public agencies for future infrastructure needs, including grants and financing options not available to a CPUC-regulated, privately-owned utility; and, ensure better coordination amongst local governmental decisions involving land use, emergency services, policy, the location and need for capital improvements, and overall planning in the water context. However, Alternative 2 would meet the following objectives for citizens outside the District boundaries: provide greater transparency and accountability to residents and businesses on the Monterey Peninsula regarding potable water supplies, as well as increased customer service and reliability; enhance customer service and responsiveness to affected CalAm customers; and provide greater local control over the rate setting process and rate increases. For customers already in the District boundaries, all the objectives would be met, similar to the proposed project.

6.4.2.2 Impact Analysis

a. Air Quality

Under Alternative 2, the District would maintain and operate non-annexed areas from its operation and maintenance facilities, albeit under a contract agreement rather than via annexation and direct representation. However, there would be no physical construction of facilities or infrastructure, no change in physical operation or maintenance activities, and no change in the number of employees employed by the District when compared to the proposed project. Section 4.1, *Air Quality,* found that estimated air emissions associated with the proposed project would not exceed applicable daily emission thresholds for operation; therefore, emissions associated with Alternative 2 would also not exceed these thresholds and air emissions would remain the same as compared to the proposed project. Overall, air quality impacts would be less than significant under Alternative 2, and impacts would be similar to the proposed project.

b. Greenhouse Gas Emissions

Similar to *Air Quality*, under Alternative 2 the District would maintain and operate non-annexed areas from its operation and maintenance facilities, albeit under a contract agreement rather than via annexation and direct representation. There would be no physical construction of facilities or infrastructure, no change in physical operation or maintenance activities, and no change in the number of employees employed by the District when compared to the proposed project. As described in Section 4.2, *Greenhouse Gas Emissions,* the proposed project would generate GHG emissions as a result of the potential net increases in daily vehicle trips and VMT associated with

project operation and maintenance activities. As there is no change to operation under this alternative, operational GHG emissions would be the same as for the proposed project. Mitigation Measures GHG-1 described in Section 4.2, *Greenhouse Gas Emissions*, would also apply to this alternative. Impacts due to operational GHG emissions and conflicts with applicable plans, policies, or regulations would be less than significant with mitigation, as they are for the proposed project.

c. Hydrology and Water Quality

No new facilities are proposed as part of Alternative 2; therefore, an increase in impermeable surfaces within the project area would not occur and thus there would be no reduction in groundwater recharge, similar to the proposed project.

No cost information is currently available related to operation and maintenance of the areas outside of District's jurisdictional boundaries if they are not annexed. However, based on the cost saving outlined in the District's *Preliminary Valuation and Cost of Service Analysis Report*, it can be assumed that water pricing would decrease in the annexation areas as a result of the proposed project (District 2019). As outlined in Section 4.3, *Hydrology and Water Quality,* reduced water pricing in the future could potentially result in increased water usage, as it is generally accepted that water use can fluctuate with cost. Since operation and maintenance would remain the same as the proposed project under this alternative, similarly successful Demand Management Measures (DMMs) would be implemented for the MWS and continued improvements in water conservation would be achieved even if water rates are less than what would have been charged by CalAm. Thus, the requirement to comply with existing laws and regulations relevant to water conservation practices and goals, including the Seaside Groundwater Basin Adjudication Decision, SWRCB Order WR 2016-0016, and water reduction strategies and goals contained within 2018 Water Conservation Legislation and California Water Conservation Act of 2009 as outlined in Section 2, *Project Description.* These existing laws and regulations would drive a reduction in water use throughout the MWS, even if the price charged for water is less. Therefore, increased demand for groundwater supplies would not occur as a result of Alternative 2 and impacts would be less than significant, similar to the proposed project.

d. Noise

Alternative 2 would not result in physical construction of facilities or infrastructure, a change in physical operation or maintenance activities, or a change in trip distribution when compared to the proposed project. Section 4.4, *Noise,* found that operation and maintenance noise and roadway noise would not result in noise impacts to sensitive receptors. Therefore, since operation and maintenance of the system would not change under this alternative, noise impacts associated with Alternative 2 would remain the same as compared to the proposed project and would also not exceed these thresholds. Overall, noise impacts would be less than significant under Alternative 2, and impacts would be similar to the proposed project.

e. Transportation

Alternative 2 would not result in a change to operation and maintenance as areas outside the District boundaries would still be served by the District in the same manner just under a different governance structure (i.e., via contract). Section 4.5, *Transportation,* found that the proposed project would have less than significant transportation impacts. Since operation and maintenance would not change under Alternative 2, this alternative would not contribute trips to the local street

network beyond those that were analyzed under the proposed project and, thus, would not exceed applicable thresholds. Impacts would therefore be less than significant, similar to proposed project.

f. Utilities and Service Systems

Because areas outside the current District boundary would still be served by the District under this alternative, just under a purchase agreement for water through the contracting entity, Alternative 2 would not result in alterations to the service provided to these areas or the number of connections to the system as compared to the proposed project. In addition, the comparatively lower cost rates between the current CalAm ownership and ownership by the District, would not be expected to result in an increase in demand on the water supply, as discussed under *Hydrology and Water Quality*. Therefore, implementation of Alternative 2 would not result in a commensurate increase in demand for wastewater treatment or need for an increase in capacity of the stormwater conveyance. Impacts would therefore be less than significant, similar to the proposed project.

g. Growth Inducement

As discussed in Section 5.1, *Growth Inducement*, the proposed project in and of itself would not directly have any economic or growth-inducing effects, as it would not alter the area or number of customers served by the water system and would slightly increase the number of employees (approximately 87 hired under District ownership versus 81 hired under CalAm ownership of the MWS, for an increase of six District employees as well as an additional six hired by CalAm to operate and maintain the Central Satellites, for a net increase of approximately 12 employees). Further, annexation under the proposed project would not remove an obstacle to growth since the areas outside the District are already served by CalAm and the contracting entity would only be replacing this service. Changing the service provider in these areas through a contract agreement, rather than via annexation, would not enable new development which would otherwise be unable to proceed. Impacts would therefore be less than significant, similar to proposed project.

6.4.3 Alternative 3: Private Third-Party Operator Alternative

6.4.3.1 Description

Alternative 3 (Private Third-Party Operator Alternative) assumes that the proposed acquisition of the MWS by the District would proceed but that CalAm employees would be relocated to other areas of the state, be retained for other services, or otherwise not be available for integration into the District. Instead the District would contract a private third-party operator to operate and maintain the system. The third-party operator would work out of the same operations and maintenance facilities and require the same number of employees to service the MWS (approximately 87 employees) as outlined in Section 2, *Project Description*. Further, employees hired by the third-party contractor would be domiciled locally (Stoldt 2020). The size of the system and the associated infrastructure would be the same for Alternative 3 as under the proposed project and no substantial construction would occur. Therefore, operation and maintenance of the system would remain the same as described in Section 2, *Project Description*, just performed by a third-party operator and not the District. This alternative still would achieve all of the stated project objectives, since the District would still acquire the system and operation and maintenance would remain the same. However, the water pricing reductions would not be as pronounced, due to the additional fees required to hire a third-party operator. Therefore, the purpose stated in Measure J "to ensure the long-term sustainability, adequacy, reliability, cost-effectiveness and quality of water

service within the Monterey Peninsula Water Management District area, to lower the cost of service to ratepayers…" would not be as fully realized as for the proposed project.

6.4.3.2 Impact Analysis

a. Air Quality

Alternative 3 would result in hiring a third-party operator for operation and maintenance activities. There would be no physical construction of facilities or infrastructure, no change in physical operation or maintenance activities, and no change in the number of employees employed by the District when compared to the proposed project. The third-party operator would operate out of the same facilities that are proposed to be acquired from CalAm by the District and employees would be domiciled locally so there would be no anticipated change in worker trips or vehicle miles traveled as compared to the proposed project. Section 4.1, *Air Quality,* found that estimated air emissions associated with the proposed project would not exceed applicable daily emission thresholds for operation; therefore, emissions associated with Alternative 3 would also not exceed these thresholds and air emissions would remain the same as compared to the proposed project. Overall, air quality impacts would be less than significant under Alternative 3, and impacts would be similar to the proposed project.

b. Greenhouse Gas Emissions

Similar to *Air Quality*, Alternative 3 would not change operation and maintenance of the MWS except that it would be performed by locally domiciled third-party contracted employees. As described in Section 4.2, *Greenhouse Gas Emissions,* the proposed project would generate GHG emissions as a result of the potential net increases in daily vehicle trips and VMT associated with project operation and maintenance activities. As there would be no change to operation under this alternative, operational GHG emissions would be the same as for the proposed project. Like the proposed project, Mitigation Measure GHG-1 described in Section 4.2, *Greenhouse Gas Emissions*, would also apply to this alternative. Impacts due to operational GHG emissions and conflicts with applicable plans, policies, or regulations would be less than significant with mitigation, as they are for the proposed project.

c. Hydrology and Water Quality

No new facilities are proposed as part of Alternative 3; therefore, an increase in impermeable surfaces within the project area would not occur and thus there would be no reduction in groundwater recharge, similar to the proposed project.

According to the District's *Preliminary Valuation and Cost of Service Analysis Report*, should a private third-party operator be contracted to operate and maintain the MWS, rates would still be lower than would have been charged by CalAm, but slightly higher than under direct District operation (District 2019). As outlined in Section 4.3, *Hydrology and Water Quality,* reduced water pricing in the future could potentially result in increased water usage, as it is generally accepted that water use can fluctuate with cost. Since operation and maintenance would remain the same as the proposed project under this alternative, similarly successful DMMs would be implemented for the MWS and continued improvements in water conservation would be achieved even if water rates are less than what would have been charged by CalAm. Thus, the requirement to comply with existing laws and regulations relevant to water conservation practices and goals, including 2018 Water Conservation Legislation and California Water Conservation Act of 2009 as outlined in Section 2,

Project Description, would drive a reduction in water use throughout the MWS, even if the price charged for water is less than under CalAm ownership. As a result, increased demand for groundwater supplies would not occur as a result of Alternative 3 and impacts would be less than significant, similar to the proposed project.

d. Noise

Alternative 3 would not result in physical construction of facilities or infrastructure, a change in operation or maintenance activities, or an increase in employees, over that which was described in Section 2, *Project Description*. Therefore, operation and maintenance activities would remain the same and roadway noise from these facilities would be similar to the proposed project. Section 4.4, *Noise,* found that operation and maintenance noise and roadway noise would not result in noise impacts to sensitive receptors. Therefore, since operation and maintenance of the system would not change under this alternative, noise impacts associated with Alternative 3 would remain the same as compared to the proposed project and would also not exceed these thresholds. Overall, noise impacts would be less than significant under Alternative 3, and impacts would be similar to the proposed project.

e. Transportation

Alternative 3 would not result in a change to operation and maintenance as areas outside the District boundaries would still be served by the District in the same manner just by a third-party contractor. Further, as outlined above, the same number of employees would be hired by the third-party contractor as the proposed project and these employees would be locally domiciled. Section 4.5, *Transportation*, found that the proposed project would have less than significant transportation impacts. Since operation and maintenance as well as worker commute distances would not change under Alternative 3, this alternative would not contribute trips to the local street network beyond those that were analyzed under the proposed project and, thus, would not exceed applicable thresholds. Impacts would therefore be less than significant, similar to proposed project.

f. Utilities and Service Systems

Operation and maintenance of the system by a private third-party contractor under Alternative 3 would not result in alterations to the service provided or the number of connections to the system. In addition, the comparatively lower cost rates between the current CalAm ownership and District ownership with a private third-party contractor would not be expected to result in an increase in demand on the water supply as discussed above under *Hydrology and Water Quality*. Therefore, implementation of Alternative 3 would not result in a commensurate increase in demand for wastewater treatment or need for an increase in capacity of the stormwater conveyance. Impacts would therefore be less than significant, similar to the proposed project.

g. Growth Inducement

As discussed in Section 5.1, *Growth Inducement*, the proposed project in and of itself would not directly have any economic or growth-inducing effects. Alternative 3 would not alter the area or number of customers served by the water system and would result in a small increase in the number of employees hired under District ownership (approximately 87, compared to 81 employed under CalAm ownership of the MWS, for an increase of six District employees as well as an additional six hired by CalAm to operate and maintain the Central Satellites, for a net increase of approximately 12 employees), similar to the proposed project as outlined in Section 5.1, *Growth*

Inducement. Further, since employees hired by the third-party contractor would be domiciled locally there is no potential for growth due to workers moving to the area. As a result, the growth inducement potential associated with Alternative 3 would remain the same as compared to the proposed project. Overall, growth inducement impacts would be less than significant under Alternative 3, and impacts would be similar to the proposed project.

6.4.4 Alternative 4: No Boundary Adjustment and Private Third-Party Operator Alternative

6.4.4.1 Description

Alternative 4 (No Boundary Adjustment and Private Third-Party Operator Alternative) assumes that the proposed acquisition of the MWS by the District would proceed, but that the application to annex areas outside the District's boundaries would not be approved by LAFCO and that the District would hire through a private third-party contractor to operate and maintain the system. Instead, similar to Alternative 2, the District's boundaries would remain the same and areas outside the District would be served under contract agreement. In addition, similar to Alternative 3, a third-party operator would be contracted by the District to operate and maintain the system, including both areas within the District service area and areas outside the District's service area served under contract. Under this alternative, operation and maintenance of the system would remain the same. Therefore, the same number of employees would be retained by the third-party contractor as under the proposed project. Further, employees hired by the third-party contractor would be domiciled locally (Stoldt 2020).

Similar to Alternative 2, this alternative would not fully realize all of the project objectives because it would not allow the District to fully implement the purpose approved by the electorate in Measure J in the areas that are not annexed. Specifically, Alternative 4 would not allow the citizens outside the District to independently own and operate the water production and distribution system serving customers presently served by the CalAm's MWS. Further, Alternative 4 would not meet the following objectives for citizens outside the District boundaries: provide direct access to locally elected policy makers for water operations; allow the District to pursue funding and other financing alternatives available to public agencies for future infrastructure needs, including grants and financing options not available to a CPUC-regulated, privately-owned utility; and, ensure better coordination amongst local governmental decisions involving land use, emergency services, policy, the location and need for capital improvements, and overall planning in the water context. However, Alternative 2 would meet the following objectives for citizens outside the District boundaries: provide greater transparency and accountability to residents and businesses on the Monterey Peninsula regarding potable water supplies, as well as increased customer service and reliability; enhance customer service and responsiveness to affected CalAm customers; and provide greater local control over the rate setting process and rate increases.

For customers already in the District boundaries, all the objectives would be met, similar to the proposed project. However, the water pricing reductions would not be as pronounced, due to the additional fees required to hire a third-party operator. Therefore, the purpose as stated under Measure J to "to ensure the long-term sustainability, adequacy, reliability, cost-effectiveness and quality of water service within the Monterey Peninsula Water Management District area, to lower the cost of service to ratepayers…" would not be as fully realized as for the proposed project.

6.4.4.2 Impact Analysis

a. Air Quality

Under Alternative 4, there would be no physical construction of facilities or infrastructure, no change in physical operation or maintenance activities and, no change in the number of employees employed by the District as compared to the proposed project. The third-party operator would operate out of the same facilities that are proposed to be acquired from CalAm by the District and employees would be domiciled locally so there would be no anticipated change in worker trips or vehicle miles traveled as compared to the proposed project. Section 4.1, *Air Quality,* found that estimated air emissions associated with the proposed project would not exceed applicable daily emission thresholds for operation; therefore, emissions associated with Alternative 4 would also not exceed these thresholds and air emissions would remain the same as compared to the proposed project. Overall, air quality impacts would be less than significant under Alternative 4, and impacts would be similar to the proposed project.

b. Greenhouse Gas Emissions

Similar to *Air Quality*, Alternative 4 would not change operation and maintenance of the MWS except that it would be performed by locally domiciled third-party contracted employees. As described in Section 4.2, *Greenhouse Gas Emissions,* the proposed project would generate GHG emissions as a result of the potential net increases in daily vehicle trips and VMT associated with project operation and maintenance activities. As there would be no change to operation under this alternative, operational GHG emissions would be the same as for the proposed project. Like the proposed project, Mitigation Measure GHG-1 described in Section 4.2, *Greenhouse Gas Emissions*, would also apply to this alternative. Impacts due to operational GHG emissions and conflicts with applicable plans, policies, or regulations would be less than significant with mitigation, as they are for the proposed project.

c. Hydrology and Water Quality

No new facilities are proposed as part of Alternative 4; therefore, an increase in impermeable surfaces within the project area would not occur and thus there would be no reduction in groundwater recharge, similar to the proposed project.

Similar to Alternatives to 2 and 3, under Alternative 4 water rates would fluctuate in the MWS and would potentially be lower as compared to CalAm operation of the system. As outlined in Section 4.3, *Hydrology and Water Quality,* reduced water pricing in the future could potentially result in increased water usage, as it is generally accepted that water use can fluctuate with cost. Since operation and maintenance would remain the same as the proposed project under this alternative, similarly successful DMMs would be implemented for the MWS and continued improvements in water conservation would be achieved even if water rates are less than what would have been charged by CalAm. Thus, the requirement to comply with existing laws and regulations relevant to water conservation practices and goals, including the Seaside Groundwater Basin Adjudication Decision, SWRCB Order WR 2016-0016, and water reduction strategies and goals contained within 2018 Water Conservation Legislation and California Water Conservation Act of 2009 as outlined in Section 2, *Project Description,* would drive a reduction in water use throughout the MWS, even if the price charged for water is less than under CalAm ownership. As a result, increased demand for

groundwater supplies would not occur as a result of Alternative 4 and impacts would be less than significant, similar to the proposed project.

d. Noise

Alternative 4 would not result in physical construction of facilities or infrastructure, a change in operation or maintenance activities, or an increase in employees, over that which was described in Section 2, *Project Description*. Section 4.4, *Noise,* found that operation and maintenance noise and roadway noise would not result in impacts to sensitive receptors. Therefore, since operation and maintenance of the system would not change under this alternative, noise impacts associated with Alternative 4 would remain the same as compared to the proposed project and would also not exceed these thresholds. Overall, noise impacts would be less than significant under Alternative 4, and impacts would be similar to the proposed project.

e. Transportation

Alternative 4 would not result in a change to operation and maintenance as areas outside the District boundaries would still be served by the District in the same manner except under contract(s). Further, as outlined above, operation and maintenance (both inside and outside the District boundaries) would be performed by a third-party contractor with the same number of local employees. Section 4.5, *Transportation*, found that the proposed project would have less than significant transportation impacts. Since operation and maintenance as well as worker commute distances would not change under Alternative 4, this alternative would not contribute trips to the local street network beyond those that were analyzed under the proposed project and, thus, would not exceed applicable thresholds. Impacts would therefore be less than significant, similar to proposed project.

f. Utilities and Service Systems

Similar to Alternatives 2 and 3, under Alternative 4 operation and maintenance of the system would not result in alterations to the service provided or the number of connections to the system. In addition, the comparatively lower cost rates between the current CalAm ownership and District ownership with a private third-party contractor would not be expected to result in an increase in demand on the water supply as discussed under *Hydrology and Water Quality*. Therefore, implementation of Alternative 4 would not result in a commensurate increase in demand for wastewater treatment or need for an increase in capacity of the stormwater conveyance. Impacts would therefore be less than significant, similar to the proposed project.

g. Growth Inducement

As discussed above under Alternatives 2 and 3, the proposed project in and of itself would not directly have any economic or growth-inducing effects, as it would not alter the area or number of customers served by the water system and would slightly increase the number of employees (approximately 87hired under District ownership versus 81 employed under CalAm ownership of the MWS, for an increase of six District employees as well as an additional six hired by CalAm to operate and maintain the Central Satellites, for a net increase of approximately 12 employees). Further, annexation under the proposed project would not removal an obstacle to growth since these areas outside the District are already served by CalAm and the District would only be replacing this service. Under Alternative 4 the District would serve the areas outside the District's jurisdictional boundaries under contract and thus would be replacing the service already provided by CalAm.

Changing the service provider in these areas through a contract agreement, would not enable new development which would otherwise be unable to proceed, similar to serving these areas through annexation. In addition, under Alternative 4 employees hired by the third-party contractor would be domiciled locally. As a result, there is no potential for growth due to workers moving to the area. As a result, the growth inducement potential associated with Alternative 4 would remain the same as compared to the proposed project. Overall, growth inducement impacts would be less than significant under Alternative 4, and impacts would be similar to the proposed project.

6.5 Environmentally Superior Alternative

This section evaluates the impact conclusions for the proposed project and the four alternatives under consideration. It then identifies the environmentally superior alternative. In accordance with the *State CEQA Guidelines*, if the No Project Alternative is identified as the environmentally superior alternative, the alternative among the remaining scenarios that is environmentally superior must also be identified.

As described above and in Section 4*, Environmental Impact Analysis*, no significant impacts would result from implementation of the proposed project or any of the alternatives considered, with the exception of GHG emissions, which would be mitigated to a less-than-significant level with incorporation of Mitigation Measure GHG-1. All the environmental impacts of the proposed project with a comparison to Alternatives 1 through Alternative 4 are presented in Table 6-3, which shows whether each alternative's environmental impact is greater, lesser, or similar to the proposed project for each issue area. Based on this comparison, Alternative 1 (No Project) would result in substantially less environmental impacts for all the resource topics, compared to the proposed project and Alternatives 2 through 4. This is because CalAm would continue to operate and maintain the MWS from its existing facilities, thus reducing air quality, greenhouse gas, noise and transportation impacts resulting from an increase in trips associated with the proposed project. However, Alternative 1 would not fulfill the project objectives.

If the environmentally superior alternative is the No Project Alternative, CEQA requires the EIR shall also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)). Therefore, the remaining discussion (following Table 6-3) focuses on the proposed project and Alternatives 2 through 4.

Table 6-3 Impact Comparison of Alternatives

Issue	Proposed Project Impact Classification	Alternative 1: No Project	Alternative 2: No Boundary Adjustment	Alternative 3: Third-Party Contractor	Alternative 4: No Boundary Adjustment and Third-Party Contractor
Air Quality	Less Than Significant	+	=	=	=
Greenhouse Gas Emission	Less Than Significant with Mitigation	+	=	=	=
Hydrology and Water Quality	Less Than Significant	=	=	=	=
Noise	Less Than Significant	+	=	=	=
Transportation	Less Than Significant	+	=	=	=
Utilities and Service Systems	Less Than Significant	=	=	=	=
Growth Inducement	Less Than Significant	=	=	=	=

+ Superior to the proposed project (reduced level of impact)

- Inferior to the proposed project (increased level of impact)

= Similar level of impact to the proposed project

As described in Section 6.3 above and summarized in Table 6-3, under Alternative 2 (No Boundary Adjustment), Alternative 3 (Third- Party Contractor), and Alternative 4 (No Boundary Adjustment and Third-Party Contractor), all impacts would be similar to the proposed project. Air quality, greenhouse gas, transportation, noise and growth inducement impacts would be similar since there would be no physical construction of facilities or infrastructure, no change in physical operation or maintenance activities, and no change in the number of employees as compared to the proposed project. Hydrology and water quality and utilities and service system impacts would be similar to the proposed project since there would be no change in water demand. Because impacts would be similar across Alternatives 2 through 4, there is no clear environmentally superior alternative. The only difference among these alternatives would be in the manner the area would be served, either under contract in the areas outside with District, by a third-party contractor hired to operate and maintain the system, or a combination of both, as well as each alternative's ability to meet project objectives. The nuances among the alternatives, as analyzed in Section 6.3, is discussed below. Based on this analysis, Alternative 3 is narrowly considered the environmentally superior alternative because it would meet more of the project objectives than the other alternatives considered.

- Alternative 1 (No Project) assumes that the proposed acquisition of the MWS by the District would not occur. In addition, since the District would not acquire the MWS, a boundary adjustment to annex service areas into the District would not be necessary and, therefore, would not occur under Alternative 1. Under this alternative, CalAm would continue to operate and maintain the MWS from its existing facilities, including the construction and operation of the MPWSP Desalination Plant. Therefore, Mitigation Measure GHG-1 would not be required. Alternative 1 would result in reduced impacts for air quality, greenhouse gas, noise and transportation, in comparison to the proposed project. Hydrology and water quality as well as

utilities and service systems would have similar impacts to the proposed project since both the proposed project and Alternative 1 would have no potential increase in demand on groundwater or surface water supplies. In addition, both Alternative 1 and the proposed project would not result in growth inducing impacts, as a result they have similar levels of impact.

With respect to the project objectives, Alternative 1 would not fulfill the project objectives because it would not allow the District to implement the purpose approved by the electorate in Measure J.

- Under Alternative 2 (No Boundary Adjustment) proposed acquisition of the MWS by the District would proceed but the application to annex areas outside of the District's boundaries would not be approved by LAFCO. Instead, the District's boundaries would remain the same and areas outside of the District's boundaries (that would be annexed under the proposed project) would still be acquired from CalAm by the District under this alternative. However, rather than through an annexation, service by the District would occur under a contract agreement with property owners, likely through an HOA or similar entity, or some other contract mechanism.

  Since operation and maintenance of these areas outside the District would remain the same as described under Section 2, *Project Description*; impacts would be similar to the proposed project and Mitigation Measure GHG-1 would be required under Alternative 2. When compared to the proposed project, the degree or extent of impact would be similar to the proposed project for all issue areas analyzed, and none of the impact determinations would change under Alternative 2.

  With respect to the project objectives, this alternative would not fully realize all of the project objectives because it would not allow the District to fully implement the purpose approved by the electorate in Measure J in the areas that are not annexed. Specifically, Alternative 2 would not allow the citizens outside the District to independently own and operate the water production and distribution system serving customers presently served by the CalAm's MWS. Further, Alternative 4 would not meet the following objectives for citizens outside the District boundaries: provide direct access to locally elected policy makers for water operations; allow the District to pursue funding and other financing alternatives available to public agencies for future infrastructure needs, including grants and financing options not available to a CPUC-regulated, privately-owned utility; and, ensure better coordination amongst local governmental decisions involving land use, emergency services, policy, the location and need for capital improvements, and overall planning in the water context. However, Alternative 2 would meet the following objectives for citizens outside the District boundaries: provide greater transparency and accountability to residents and businesses on the Monterey Peninsula regarding potable water supplies, as well as increased customer service and reliability; enhance customer service and responsiveness to affected CalAm customers; and provide greater local control over the rate setting process and rate increases.

- Alternative 3 (Third-Party Contractor) assumes that the proposed acquisition of the MWS by the District would proceed but that the District would contract a private third-party operator to operate and maintain the system.

  Alternative 3 would not alter system operation and maintenance nor the number of employees required. Further, employees would be domiciled locally. As a result, impacts would be similar to the proposed project and Mitigation Measure GHG-1 would be required under Alternative 3. When compared to the proposed project, the degree or extent of impact would be similar to the proposed project for all issue areas analyzed and none of the impact determinations would change under Alternative 3.

With respect to the project objectives, Alternative 3 would fulfill all of the stated project objectives since the District would still acquire the system and operation and maintenance would remain the same. However, the water pricing reductions would not be as pronounced, due to the additional fees required to hire a third-party operator. Therefore, the purpose as stated under Measure J to "to ensure the long-term sustainability, adequacy, reliability, cost-effectiveness and quality of water service within the Monterey Peninsula Water Management District area, to lower the cost of service to ratepayers…" would be met, but to a lesser extent. In the absence of any discernable comparison environmentally, preference was given to the alternative that most met the project objectives. Therefore, Alternative 3 is identified as the environmentally superior alternative for the purpose of complying with CEQA Guidelines Section 15126.6(e)(2). However, the environmental effects of this alternative are similar to the proposed project and to Alternatives 2 and 4.

- Under Alternative 4 (No Boundary Adjustment and Third-Party Contractor) the proposed acquisition of the MWS by the District would proceed, but the application to annex areas outside the District's boundaries would not be approved by LAFCO and the District would contract a private third-party operator to operate and maintain the system. Instead, similar to Alternative 2, the District's boundaries would remain the same and areas outside the District would be served under contract agreement. In addition, similar to Alternative 3, a third-party operator would be contracted by the District to operate and maintain the system, including both areas within the District and areas outside the District's service area served under contract.

  Similar to Alternatives 2 and 3, Alternative 4 would not alter system operation and maintenance nor the number of employees required. Further, employees would be domiciled locally. As a result, impacts would be similar to the proposed project and implementation of Mitigation Measure GHG-1 would be required under Alternative 4. When compared to the proposed project, the degree or extent of impact would be similar to the proposed project for all issue areas analyzed and none of the impact determinations would change under Alternative 4.

  With respect to the project objectives, similar to Alternative 2, Alternative 4 would not fully realize all of the project objectives because proposed annexation areas would still be considered outside the District and therefore would not have any representation within the District. Customers outside the District boundaries would not be allowed to vote for District Board of Directors and these customers would not have direct contact through their municipal elected officials as they would if they were annexed within the District. In addition, similar to Alternative 3, water pricing reductions would not be as pronounced, due to the additional fees required to hire a third-party operator. Therefore, even for areas within the District the purpose as stated under Measure J to "to ensure the long-term sustainability, adequacy, reliability, cost-effectiveness and quality of water service within the Monterey Peninsula Water Management District area, to lower the cost of service to ratepayers…" would be met, but to a lesser extent. As a result, under Alternative 4 none of the project objectives would be met for areas outside the District and for areas within the District the primary purpose under Measure J would not be fully realized.

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7.2 List of Preparers

This EIR was prepared by the District with the assistance of Rincon Consultants, Inc. Consultant staff involved in the preparation of the EIR are listed below.

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