# 4.13 Public Services and Utilities

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This section evaluates the potential impacts on public services and utilities resulting from implementation of the Monterey Peninsula Water Supply Project (MPWSP or proposed project). Public services in the project area include fire and police protection, emergency medical services, hospitals, and schools. Public utilities in the project area provide solid waste disposal, water, wastewater, stormwater drainage, electricity, natural gas, and telecommunications services. This section also presents mitigation measures to reduce or eliminate potential impacts, as appropriate.

Section 4.9, Traffic and Transportation, of this EIR addresses the potential for the proposed project to disrupt access for emergency vehicles during construction. Chapter 8, Growth-Inducement Potential and Secondary Effects of Growth, evaluates the potential for the project to induce growth and contribute to indirect (secondary) impacts, including increased demand for public services and utilities.

## 4.13.1 Setting

Information on public services and utilities in the project area was derived from available planning documents, public utility websites, and consultation with local agency personnel. **Table 4.13-1** shows the jurisdictions within which the project components would be located. **Table 4.13-2** summarizes utility and public service providers in the project area.

### 4.13.1.1 Fire Protection, Law Enforcement, and Emergency Services

#### *Fire Protection*

Several local agencies provide fire protection service in the project area (see **Table 4.13-2**). Most of these agencies serve more than one jurisdiction or area.

##### Unincorporated Monterey County

Two agencies provide fire protection service to the unincorporated area surrounding the proposed project. The North County Fire Protection District serves the unincorporated area north of the city of Marina (NCFPD, 2013). The Monterey County Regional Fire District serves approximately 350 square miles east of the city of Marina, including the former Fort Ord military base and areas southeast of the city of Monterey. The Monterey County Regional Fire District has 52 full-time employees and 40 volunteer firefighters (MCRFD, 2013).

**TABLE 4.13-1**
**PROJECT COMPONENTS WITHIN LOCAL JURISDICTIONS**

| Project Component | Unincorporated Monterey County | City of Marina | City of Sand City | City of Seaside | City of Monterey | City of Pacific Grove | Federal Lands[a] |
|---|---|---|---|---|---|---|---|
| Subsurface Slant Wells | | ✓ | | | | | |
| Source Water Pipeline | ✓ | ✓ | | | | | |
| MPWSP Desalination Plant | ✓ | | | | | | |
| Desalinated Water Pipeline | ✓ | ✓ | | | | | |
| Brine Discharge Pipeline | ✓ | | | | | | |
| Salinas Valley Return Pipeline | ✓ | | | | | | |
| Transmission Main | | ✓ | ✓ | ✓ | | | |
| Transfer Pipeline | | | | ✓ | | | |
| Monterey Pipeline | | | ✓ | ✓ | ✓ | ✓ | ✓ |
| ASR Conveyance Pipelines, ASR Pump-to-Waste Pipeline | | | | ✓ | | | |
| ASR-5 and ASR-6 Wells, ASR Settling Basin | | | | ✓ | | | ✓ |
| ASR Pump Station, Terminal Reservoir | | | | ✓ | | | |
| Valley Greens Pump Station (both site options) | ✓ | | | | | | |
| Main System–Hidden Hills Interconnection Improvements | ✓ | | | | | | |
| Ryan Ranch–Bishop Interconnection Improvements | ✓ | | | | ✓ | | |

NOTE:
[a] *Federal Lands* refers to lands owned by the U.S. Army that are located within the cities of Monterey and Seaside. These lands include the Presidio of Monterey and the portions of the former Fort Ord military base that are zoned and designated for Military (M) land uses, such as the Fitch Park military housing area. Local jurisdictions do not have authority over land use decisions on federal lands.

### City of Marina

The Marina Fire Department serves the city of Marina as well as parts of the former Fort Ord military base (MFD, 2013).

### Cities of Seaside and Del Rey Oaks

The Seaside Fire Department provides both emergency response and fire prevention services to the city of Seaside; the Department also provides these services to the city of Del Rey Oaks and parts of the former Fort Ord military base on a contractual basis (City of Seaside, 2004; Seaside Fire Department, 2013). Annexation of former Fort Ord military base lands to the city of Seaside nearly tripled the area served by the Seaside Fire Department; following annexation, city staff identified the need for a second fire station in the northern part of the city to help achieve the Department's adopted response goal of 5 minutes (City of Seaside, 2004).

**TABLE 4.13-2**
**LOCAL UTILITY AND PUBLIC SERVICE PROVIDERS, BY JURISDICTION**

| Jurisdiction | Monterey County Regional Fire District | Monterey County Sheriff's Office | North County Fire Protection District | Monterey Regional Waste Management District | Monterey Regional Water Pollution Control Agency | Monterey County Water Resources Agency | Monterey Peninsula Water Management District | Monterey Peninsula Unified School District | Pacific Gas and Electric Company | California American Water Company | Marina Fire Department | Marina Police Department | Marina Coast Water District | Seaside Fire Department | Seaside Police Department | Seaside County Sanitation District | Sand City Police Department | City of Monterey Fire Department | City of Monterey Police Department | Pacific Grove Police Department | Pacific Grove Unified School District | Carmel Unified School District |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unincorporated Monterey County | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | | | | | | | | | | | | ✓ |
| City of Marina | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | | | | | | | | |
| City of Sand City | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | ✓ | ✓ | | | | |
| City of Seaside | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | | | | | | |
| Federal Lands[a] | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | |
| City of Monterey | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | ✓ | | ✓ | ✓ | | | |
| City of Pacific Grove | | | | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | | | | | | | | ✓ | | ✓ | ✓ | |

NOTE:
[a] *Federal Lands* refers to lands owned by the U.S. Army that are located within the cities of Monterey and Seaside. These lands include the Presidio of Monterey and the portions of the former Fort Ord military base that are zoned and designated for Military land uses, such as the Fitch Park military housing area. Local jurisdictions do not have authority over land use decisions on federal lands.

#### Cities of Monterey, Sand City, and Pacific Grove

The City of Monterey Fire Department provides fire protection to the city of Monterey and all areas within its jurisdictional boundaries, including the Army Defense Language Institute and Foreign Language Center, the Presidio of Monterey, and the Naval Postgraduate School and its housing at La Mesa Village; the Department also provides fire protection to the cities of Sand City and Pacific Grove. The Monterey Fire Department has 66 paid staff, 2 part-time fire inspectors, and 4 fire stations (City of Monterey Fire Department, 2013).

### *Police*

The Monterey County Sheriff's Office operates the county jail facilities and provides police services to nearly the entire unincorporated county area (Monterey County Sheriff's Office, 2013). The cities of Marina, Monterey, Pacific Grove, Sand City, and Seaside have an independent police force that serves the areas within their city limits. The Seaside and Marina Police Departments also serve the annexed portions of the former Ford Ord military base. Following annexation, the response area of the Seaside Police Department increased from 2.69 square miles to 8.96 square miles (City of Seaside, 2004).

### *Emergency Medical Services*

The Monterey County Emergency Medical Services Agency is a Monterey County Health Department agency that incorporates over 100 participating agencies under one jurisdictional authority, including fire departments, ambulance companies, hospitals, and police departments (MCHD, 2013). Monterey County has four major hospitals: Community Hospital of the Monterey Peninsula in Monterey, Natividad Medical Center in Salinas, Salinas Valley Memorial Hospital in Salinas, and George L. Mee Memorial Hospital in King City (MTY County.com, 2013).

## 4.13.1.2 Schools and Libraries

### *Schools*

Three school districts—the Monterey Peninsula Unified School District, the Pacific Grove Unified School District, and the Carmel Unified School District—serve the project area. The Monterey Peninsula Unified School District serves the cities of Marina, Seaside, Sand City, Del Rey Oaks, and Monterey, as well as the former Fort Ord military base (MPUSD, 2013). The Pacific Grove Unified School District generally serves the city of Pacific Grove as well as Pebble Beach (between Pacific Grove and the Bird Rock area); the District has two elementary schools, one middle school, two high schools, and one adult education center (PGUSD, 2013). The Carmel Unified School District serves the Carmel Valley and includes three elementary schools, two middle schools, and two high schools (CUSD, 2013). **Table 4.13-3** shows the locations of schools in the project vicinity.

### *Libraries*

The project area is served by three library systems: Monterey County Free Libraries, City of Monterey Public Library, and City of Pacific Grove Public Library. The Monterey County Free Libraries serve all of Monterey County and have branches in the cities of Marina and Seaside

**TABLE 4.13-3**
**SCHOOLS IN THE VICINITY OF PROJECT COMPONENTS**

| Project Component | Schools within 0.25 Mile of Project Components |
|---|---|
| Desalinated Water Pipeline | • Olsen Elementary<br>261 Beach Road, Marina |
| Transmission Main | • Marina Del Mar Elementary School<br>3066 Lake Drive, Marina<br>• Central Coast High School<br>200 Coe Avenue, Seaside |
| Transfer Pipeline | • Monterey Adult School/Cabrillo Family Center<br>1295 La Salle Avenue, Seaside<br>• Monterey Bay Christian Middle School<br>1395 La Salle Avenue, Seaside<br>• Ord Terrance Elementary<br>1755 La Salle Avenue, Seaside<br>• International School of Monterey<br>1720 Yosemite Street, Seaside<br>• King Elementary School<br>1713 Broadway Avenue, Seaside<br>• Highland Elementary<br>1650 Sonoma Avenue, Seaside |
| ASR-5 and ASR-6 Wells, ASR Conveyance Pipelines, ASR Settling Basin | • Seaside Middle School<br>999 Coe Avenue, Seaside |
| Monterey Pipeline | • Bayview Elementary School<br>680 Belden Street, Monterey<br>• Monterey High School<br>101 Herrmann Drive, Monterey<br>• Pacific Grove Middle School<br>835 Forest Avenue, Pacific Grove<br>• Robert Down Elementary School<br>485 Pine Avenue, Pacific Grove |
| Valley Greens Pump Station, Site Option 2 | • Carmel Valley Middle School<br>4380 Carmel Valley Road, Carmel |

SOURCES: MPUSD, 2013; PGUSD, 2013.

(MCFL, 2013). There are two libraries within 0.25 mile of the project area: Monterey County Free Libraries Marina Branch, at 160 Seaside Circle in Marina, and the City of Monterey Public Library, at 625 Pacific Street in Monterey.

## 4.13.1.3 Solid Waste Services

The Monterey Regional Waste Management District manages the Monterey Peninsula's solid waste collection, disposal, and recycling system. It also receives most of Monterey County's sewage sludge. The Waste Management District serves an 853-square-mile area and a population of approximately 170,000 people. The service area encompasses the cities of Marina, Seaside, Sand City, Del Rey Oaks, Monterey, Carmel-by-the-Sea, and Pacific Grove and the unincorporated areas of Big Sur, Carmel Highlands, Carmel Valley, Castroville, Corral De Tierra, Laguna Seca, Moss Landing, Pebble Beach, San Benancio, and Toro Park (MRWMD, 2013a).

The Waste Management District operates the Monterey Peninsula Landfill, a materials recovery facility, and a transfer station at a 475-acre site north of the city of Marina. Any solid waste generated by project construction or operation would be disposed of at the landfill or diverted for recycling or reuse at the materials recovery facility. The landfill operates 6 days per week and is permitted to receive 3,500 tons of waste per day; it has a remaining capacity of approximately 48.5 million cubic yards and is expected to reach its permitted capacity in 2107 (CalRecycle, 2013). The landfill receives approximately 300,000 tons of waste per year, which averages to less than 1,000 tons of waste per day (MRWMD, 2013b). In addition to the more commonly recycled and reused materials (such as paper, cardboard, bottles, and cans), materials targeted by operators at the materials recovery facility include commercial waste, wood waste, and yard waste, construction and demolition debris, and materials in self-haul loads (MRWMD, 2013a).

## 4.13.1.4 Water

The water districts and facilities that provide drinking water to residents and businesses in the project area are described in the subsections below.

### *Marina Coast Water District*

The Marina Coast Water District (MCWD) provides water for residents in the city of Marina and to areas within the former Fort Ord military base. The MCWD's water supply comes from three groundwater wells located in the 900-foot-deep aquifer of the Salinas Valley Groundwater Basin. The MCWD also has a desalination plant with a capacity of 300 acre-feet per year (afy); the plant is capable of providing up to 13 percent of the annual water demand, but has not operated in recent years (MCWD, 2013).

### *California American Water Company*

As described in Chapter 3, Project Description, California American Water Company (CalAm) supplies water to most of the jurisdictions in the project area (see **Figure 3-1**). CalAm's existing water supply sources for the Monterey District service area (Monterey District) are discussed in Section 2.4 of Chapter 2, Water Demand, Supplies, and Water Rights.

### *Seaside Municipal Water System*

The Seaside Municipal Water System, which is operated and maintained by the City of Seaside, provides water service to a limited number of residents along General Jim Moore Boulevard on the east side of the city. The system includes one groundwater production well and two 500,000-gallon water tanks (City of Seaside, 2013).

### *Sand City Coastal Desalination Plant*

The Sand City Coastal Desalination Plant, completed in April 2010, is owned by the City of Sand City and operated by CalAm. The Sand City Coastal Desalination Plant is capable of producing up to 300 afy of potable water supplies, of which 94 afy is served to the CalAm Monterey District service area (RBF Consulting, 2013). The 94 afy is CalAm's long-term entitlement, pursuant to MPWMD Ordinance 132 and agreements between the Sand City and CalAm. Sand City is

entitled to the balance of the plant's capacity (206 afy) to support its future growth. All water produced by the Sand City Coastal Desalination Plant is delivered to and distributed to water users via CalAm's distribution system.

## 4.13.1.5 Wastewater Treatment

Two wastewater treatment providers serve the project area: the Monterey Regional Water Pollution Control Agency (MRWPCA) and the Carmel Area Wastewater District (CAWD).

### *Monterey Regional Water Pollution Control Agency*

The MRWPCA operates the Regional Wastewater Treatment Plant, which is north of the city of Marina and immediately east of the proposed MPWSP Desalination Plant site on Charles Benson Road. The MRWPCA is Monterey County's primary provider of wastewater treatment. The MRWPCA serves the communities of Pacific Grove, Monterey, Del Rey Oaks, Seaside, Sand City, Marina, Castroville, Moss Landing, Boronda, and Salinas and some unincorporated areas in northern Monterey County. The MRWPCA also operates a water recycling facility at the treatment plant; maintains 25 pump stations connected to the plant; and, under contract with the Monterey County Water Resources Agency, manages the recycled water distribution system. Sixty percent of incoming wastewater receives tertiary treatment at the MPWPCA Regional Wastewater Treatment Plant. The recycled water is then distributed to Salinas Valley agricultural growers for irrigation use (MRWPCA, 2013a). Excess wastewater receives secondary treatment before being discharged to Monterey Bay via the existing MRWPCA ocean outfall and diffuser.

### *Carmel Area Wastewater District*

The CAWD provides wastewater collection, treatment, and disposal for a 5.5-mile service area that encompasses Carmel-by-the-Sea and outlying county areas from Carmel Bay to the west, Carmel Highlands to the south, and Del Monte Forest to the north. The CAWD serves a population of approximately 11,000 people. The CAWD treatment plant, located on the south bank of the Carmel River west of Highway 1, includes a facility that recycles water for irrigation use at several golf courses, including Pebble Beach, Poppy Hills, and Spanish Bay (CAWD, 2013).

## 4.13.1.6 Stormwater Drainage

Monterey County Water Resources Agency operates and maintains drainage facilities in 14 drainage maintenance zones and districts throughout Monterey County. The stormwater drainage system is composed of approximately 57 miles of drainage ways (e.g., streams, drainage ditches, and drainage channels); eight pump stations; 9 miles of river levees; two large earthen dams; and numerous culverts, tide gates, and concrete structures (MCWRA, 2013).

## 4.13.1.7 Electricity, Natural Gas, and Telecommunications

Pacific Gas and Electric Company (PG&E) provides electricity and natural gas to all of Monterey County, and Pacific Bell provides telephone service. Section 4.18, Energy Conservation, presents more information on PG&E service in the project area.

# 4.13.2 Regulatory Framework

## 4.13.2.1 Federal Regulations

No federal regulations pertaining to public services and utilities are applicable to the proposed project.

## 4.13.2.2 State Regulations

### *California Public Utilities Commission*

The California Public Utilities Commission (CPUC)—the CEQA lead agency for this project—is responsible for ensuring that investor-owned (private) water, energy, and telecommunications utilities deliver safe, clean, and/or reliable services to customers at reasonable rates. The CPUC does not regulate publicly-owned utilities. The CPUC regulates CalAm, the project applicant.

### *California Integrated Waste Management Act of 1989 and Assembly Bill 341*

The California Integrated Waste Management Board (CIWMB) was created to oversee, manage, and track waste generated in California. The authority and responsibilities of the CIWMB were promulgated in Assembly Bill (AB) 939 and Senate Bill 1322, which were signed into law as the California Integrated Waste Management Act of 1989 (Public Resources Code [PRC], Division 30). The California Integrated Waste Management Act, as modified by subsequent legislation, mandated all California cities and counties to implement programs to reduce, recycle, and compost at least 50 percent of wastes by 2000 (PRC Section 41780). In January 2010, the CIWMB changed its name to the Department of Resources, Recycling, and Recovery (CalRecycle).

AB 341, which amends the Integrated Waste Management Act of 1989 and was adopted by the California legislature in October 2011, directs CalRecycle to adopt a state policy that actively seeks to achieve a goal of diverting 75 percent of solid waste from landfills by 2020. The new legislation focuses largely on commercial waste generators, as this sector was identified as the most in need of improved waste management. AB 341 does not alter the 50 percent diversion mandate; rather, it is a "legislative declaration of policy" to guide CalRecycle's administration of the California Integrated Waste Management Act (Theroux, 2012).

A jurisdiction's diversion rate is the percentage of total generated waste it diverts from disposal through source reduction, reuse, and recycling programs. The state determines compliance with the 50 percent diversion mandate through a complex formula. Use of the formula requires cities and counties to conduct empirical studies to establish a base-year waste generation rate against which future diversion is measured. The diversion rate in subsequent years is determined through deduction instead of direct measurement. Rather than counting the amount of material recycled and composted, the city or county tracks the amount of material disposed of at landfills and then subtracts that amount from the base-year amount; the difference is assumed to be diverted (PRC Section 41780.2).

### *Utility Notification Requirements*

California law (Government Code Section 4216 et seq.) requires owners and operators of underground utilities to become members of, participate in, and share the costs of a regional notification center. Government Code Section 4216 requires that persons planning to conduct any excavation contact the regional notification center. Section 4216 includes several related requirements, including requirements for excavations near "high priority utilities",[1] which include high-pressure natural gas pipelines and other pipelines that are potentially hazardous to workers or the public if damaged or ruptured. Underground Service Alert North (USA North) is the notification center for the project area. USA North receives planned excavation reports and transmits the information to all participating members that may have underground facilities at the location of excavation. The USA North members will then mark or stake their facility, provide information about the location, or advise the excavator of clearance (USA North, 2013).

## 4.13.2.3 Local Regulations

**Table 4.13-4** describes the state, regional, and local land use plans, policies, and ordinances pertaining to public services and utilities that are relevant to the MPWSP and that were adopted for the purpose of avoiding or mitigating an environmental effect. Also included in **Table 4.13-4** is an analysis of project consistency with such plans, policies, and ordinances. Where the analysis concludes the proposed project would not conflict with the applicable plan, policy, ordinance, the finding is noted and no further discussion is provided. Where the analysis concludes the proposed project may conflict with the applicable plan, policy, or ordinance, the reader is referred to Section 4.13.3, Impacts and Mitigation Measures, for additional discussion.

### *Monterey County Integrated Waste Management Plan*

The Monterey County Integrated Waste Management Plan incorporates relevant provisions of the California Green Building Standards Code, which Monterey County has adopted. Diversion rates related to construction are from the California Green Building Standards Code (Carbajal, 2013). Section 5.408.1 of the code requires non-residential projects to recycle and/or salvage for reuse a minimum of 50 percent of nonhazardous construction and demolition waste. Further, Section 5.408.3, Excavated soil and land clearing debris, requires that 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting primarily from land clearing be reused or recycled (unless the vegetation or soil is contaminated with disease or pest infestation.) CalRecycle reviews the Monterey County Integrated Waste Management Plan every 5 years, most recently in December 2012. The latest update to the Integrated Waste Management Plan ensures compliance with all current regulatory and reporting requirements (MCHD, 2012).

[1] Consistent with California Government Code Section 4216(e), high priority utilities include natural gas pipelines carrying petroleum with normal operating pressures greater than 415kPA (60 pounds per square inch gauge); petroleum pipelines; pressurized sewage pipelines; high voltage electric supply lines, conductors, or cables that have a potential to ground of greater than 60 kv; and hazardous materials pipelines that are potentially hazardous to workers or the public if damaged.

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**TABLE 4.13-4**
**APPLICABLE STATE, REGIONAL, AND LOCAL PLANS AND POLICIES RELEVANT TO PUBLIC SERVICES AND UTILITIES**

| Project Planning Region | Applicable Planning Document | Plan Element/ Section | Project Component(s) | Specific Plan, Policy, or Ordinance | Relationship to Avoiding or Mitigating a Significant Environmental Impact | Project Consistency with Plan, Policy, or Ordinance |
|---|---|---|---|---|---|---|
| City of Marina | City of Marina General Plan | Community Infrastructure | Subsurface Slant Wells, Source Water Pipeline, Desalinated Water Pipeline, Transmission Main | ***Policy 3.3:*** The intent of the General Plan Transportation and Infrastructure Element is to ensure that the requirements for transportation, water supply, wastewater collection and treatment, storm water drainage, and solid-waste disposal generated by existing and future development are adequately provided for. It is also the intent of this section to ensure, to the maximum extent possible, that the provision of such services does not have a deleterious affect on either natural resources or the quality of life of residents of Marina or other potentially affected areas. The major concerns of this section are outlined below:<br>11. Minimize the consumption of water for urban purposes and make maximum possible use of recycled water.<br>12. Design stormwater runoff facilities so as to the recharge ground water aquifers while protecting the water quality of these aquifers.<br>13. Ensure long-term availability of required facilities and services prior to approval of new construction.<br>14. Support water resource programs, including desalinization and reclamation efforts, to provide an adequate water supply to accommodate General Plan permitted growth.<br>15. Promote reductions in the generation of non-recyclable solid waste. | The intent of this policy is to ensure sufficient and environmentally responsible provision of public utilities for existing and future development. | Consistent: The purpose of the MPWSP is to provide replacement water supplies for those portions of CalAm's existing supplies that have been constrained by legal decisions regarding CalAm's diversions from the Carmel River and pumping from the Seaside Groundwater Basin. Implementation of the proposed project would not result in new development that would require provision for transportation, water supply, or wastewater collection and treatment. The proposed project would be required to comply with State and local regulations regarding stormwater management, waste diversion, and recycling. |
| City of Marina | City of Marina General Plan | Community Land Use | Subsurface Slant Wells, Source Water Pipeline, Desalinated Water Pipeline, Transmission Main | ***Policy 2.4*****:** The intent of the community land use element is to help achieve the overall General Plan goals of providing a satisfying, safe and healthful living and working environment and promoting the economic well-being of city residents and businesses. To accomplish these ends, City planning, regulatory and development decisions shall be governed by the following policies which adhere to the goals in the "Introduction" (Chapter 1).<br>13. The City will provide adequate urban services, including water, only to areas within its designated Urban Growth Boundary. The costs of providing the public facilities and services needed for new development shall be borne by new development unless the City chooses to help assume such costs in order to obtain identified community-wide benefits. | The intent of this policy is to encourage growth in urban areas and minimize impacts of development in areas outside the urban growth boundary. | Consistent: The Subsurface Slant Wells, Source Water Pipeline, Desalinated Water Pipeline, Transmission Main are within the Marina Urban Growth Boundary and would not require the need for urban services expansion. |
| City of Monterey | California Coastal Act | Development | Monterey Pipeline, Ryan Ranch–Bishop Interconnection Improvements | ***Section 30254 Public Works Facilities.*** New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division; provided, however, that it is the intent of the Legislature that State Highway Route 1 in rural areas of the coastal zone remain a scenic two-lane road. Special districts shall not be formed or expanded except where assessment for, and provision of, the service would not induce new development inconsistent with this division. Where existing or planned public works facilities can accommodate only a limited amount of new development, services to coastal dependent land use, essential public services and basic industries vital to the economic health of the region, state, or nation, public recreation, commercial recreation, and visitor-serving land uses shall not be precluded by other development. | The intent of this policy is to limit the incidental growth effects of new and expanded public service systems. | Consistent: The purpose of the MPWSP is to provide replacement water supplies for those portions of CalAm's existing supplies that have been constrained by legal decisions regarding CalAm's diversions from the Carmel River and pumping from the Seaside Groundwater Basin. Although the proposed project would provide some water to meet future demand, the growth associated with that future demand was evaluated in the General Plans prepared by the respective jurisdictions. |
| City of Monterey | Monterey Harbor Land Use Plan | Water Resources | Monterey Pipeline | ***Policy d:*** Private water supplies are prohibited to serve existing and new development. No coastal development permit shall be issued without a City determination that (1) no new water is required to serve the new development; or (2) there is unallocated water available in the City's allocation from the Monterey Peninsula Water Management District, or its successor, to support the new development. This determination shall include an evaluation of the proposed development's water demand, based on MPWMD's or its successor's, water unit value system. All water transfers and corresponding retirements, if any, shall be described and agrees to prior to any City determination. | This policy is intended to ensure that there are sufficient water allocations for all new development. | Consistent: Development proposed within the city of Monterey would replace existing water supply and meet existing demand. No new water would be required to service this development. |
| City of Monterey | Del Monte Beach Land Use Plan | Water and Marine Resources | Monterey Pipeline | ***Policy 1:*** Available water shall be allocated to the following priority uses: coastal dependent uses, essential public services and basic industries vital to the economic health of the City, region, state, or nation, public recreation, commercial recreation, and visitor-serving land uses. Allocation may also be made to vacant, legal lots of record for one residential connection each. | This policy is intended to allocate water to priority uses. | Consistent: Development proposed within the city of Monterey would replace existing water supply and meet existing demand. No new water would be required to service this development. |
| City of Monterey | Del Monte Beach Land Use Plan | Water and Marine Resources | Monterey Pipeline | ***Policy 2:*** Water conservation shall be promoted by requiring conformance with the Monterey Peninsula Water Management District's, or its successor's, water conservation regulations. The City shall require state-of-the-art low-flow water fixtures and drip or other water-conserving irrigation. | This policy is intended to promote water conservation and reduce water waste. | Consistent: Development proposed within the city of Monterey would replace existing water supply and meet existing demand. No new water would be required to service this development. |

**TABLE 4.13-4 (Continued)**
**APPLICABLE STATE, REGIONAL, AND LOCAL PLANS AND POLICIES RELEVANT TO PUBLIC SERVICES AND UTILITIES**

| Project Planning Region | Applicable Planning Document | Plan Element/ Section | Project Component(s) | Specific Plan, Policy, or Ordinance | Relationship to Avoiding or Mitigating a Significant Environmental Impact | Project Consistency with Plan, Policy, or Ordinance |
|---|---|---|---|---|---|---|
| City of Monterey | Del Monte Beach Land Use Plan | Water and Marine Resources | Monterey Pipeline | ***Policy 16:*** Private water supplies are prohibited to serve existing and new development. No coastal development permit shall be issued without a City determination that (1) no new water is required to serve the new development; or (2) there is unallocated water available in the City's allocation from the Monterey Peninsula Water Management District, or its successor, to support the new development. This determination shall include an evaluation of the proposed development's water demand, based on MPWMD's or its successor's, water unit value system. All water transfers and corresponding retirements, if any, shall be described and agrees to prior to any City determination.<br>Prior to the commencement of construction of new development, evidence of water service, in the form of a water use permit from the Monterey Peninsula Water Management District, or its successor, shall be provided to the City Planning Department. | This policy is intended to ensure that there are sufficient water allocations for all new development. | Consistent: Development proposed within the city of Monterey would replace existing water supply and meet existing demand. No new water would be required to service this development. |
| City of Seaside | City of Seaside Local Coastal Program Land Use Plan | Coastal Zone | Monterey Pipeline | ***Policy NCR-CZ 3.1.A –*** Provision for Potable Water Supply.<br>**11** ii. New development shall be sited in areas with adequate public utility services (i.e., water treatment and delivery) and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.<br>Where existing public utility services, including water, can accommodate only a limited amount of new development, priority uses including essential public services, public recreation, and visitor-serving commercial land uses shall have priority over other development/uses. | The intent of this policy is to encourage new development to occur in areas where existing utility services exist and to minimize the adverse effects of new utility services. | Consistent: Development proposed for Seaside coastal zone would not require public utility services. |
| City of Seaside | City of Seaside Local Coastal Program Land Use Plan | Coastal Zone | Monterey Pipeline | ***Policy NCR-CZ 3.1.B – Protection of Potable Water Supply – Water Conservation.*** The City shall require that all new development, changes of ownership, and changes or expansions of use within the Coastal Zone meet or exceed Monterey Peninsula Water District's Water Efficiency Standards. | This policy is intended to promote water conservation and reduce water waste. | Consistent: Development proposed for Seaside coastal zone would not require potable water. |
| City of Seaside | City of Seaside Local Coastal Program Land Use Plan | Coastal Zone | Monterey Pipeline | ***Policy NCR-CZ 3.1.D – Adequate Water.*** Development may only be approved if it is demonstrated to have a safe, adequate, and sustainable water supply. | This policy is intended to reduce waste. | Consistent: Development proposed for Seaside coastal zone would not require potable water. |
| City of Seaside | City of Seaside Local Coastal Program Land Use Plan | Coastal Zone | Monterey Pipeline | ***Policy NCR-CZ 3.2.A – Water Reserves.*** The City shall continue to support regional efforts to develop an alternative water supply for the City of Seaside. | This policy is intended to support the use of alternative water supplies. | Consistent: Development proposed for Seaside coastal zone would advance regional efforts to develop an alternative water supply for portions of Seaside within CalAm's service area. |
| City of Seaside | City of Seaside Local Coastal Program Land Use Plan | Coastal Zone | Monterey Pipeline | ***Policy NCR-CZ 5.1.B - Protection from Natural Hazards.***<br>***Goal 7:*** Ensure the continuous function of utilities and critical transportation facilities.<br>***Action 7.10:*** Encourage replacing aboveground utility lines with underground facilities.<br>***Action 7.11:*** Assure that utility lines are installed underground for new development.<br>***Action 7.22:*** Ensure that utility systems in new developments are constructed in ways that reduce or eliminate flood damage. | This policy is intended to minimize visual and other adverse effects of above-ground utility lines. | Consistent: Development proposed for Seaside coastal zone would be buried below ground surface and therefore would not impede continuous function of transportation facilities or contribute to risk of flood damage. |
| City of Seaside | City of Seaside Local Coastal Program Land Use Plan | Coastal Zone | Monterey Pipeline | ***Policy LUD-CZ 3.3.A – Considerations for Water Resources/Utilities.***<br>I. Installation of new water utility infrastructure shall be provided in a manner which allows development at densities and locations consistent with the land use designations defined in Policy LUD-CZ 1.1.A and taking into account the natural resource protection policies of this plan.<br>II. Prior to the approval of any development within the coastal zone, adequate water capacity shall be demonstrated consistent with the provisions and requirements of the Monterey Peninsula Water Management District.<br>III. Capacity for additional water service shall be reserved according to the following ranking of priorities: (a) essential public services; (b) new and existing recreational or open space uses within the coastal zone; and (c) visitor-serving commercial uses.<br>Applications for development shall demonstrate an adequate, sustainable, public (i.e., publicly owned and/or managed) water supply to support the proposed development. Private water supplies are prohibited to serve existing and new development. | This policy is intended to minimize the adverse effects of new utility services and promote water conservation. | Consistent: The MPWSP would be constructed to replace existing supply and meet existing demand (see Chapter 2 for additional discussion). |

**TABLE 4.13-4 (Continued)**
**APPLICABLE STATE, REGIONAL, AND LOCAL PLANS AND POLICIES RELEVANT TO PUBLIC SERVICES AND UTILITIES**

| Project Planning Region | Applicable Planning Document | Plan Element/ Section | Project Component(s) | Specific Plan, Policy, or Ordinance | Relationship to Avoiding or Mitigating a Significant Environmental Impact | Project Consistency with Plan, Policy, or Ordinance |
|---|---|---|---|---|---|---|
| City of Seaside | City of Seaside Local Coastal Program Land Use Plan | Coastal Zone | Monterey Pipeline | ***Policy LUD-CZ 3.4.A – Considerations for Water Quality/Wastewater.***<br>I. Prior to the approval of any new development within the coastal zone, adequate sewage treatment facility capacity shall be demonstrated consistent with the provisions and requirements of the California Regional Water Quality Control Board.<br>II. Capacity for additional wastewater collection, conveyance and treatment shall be verified.<br>III. Alternatives for demonstrating additional wastewater treatment capacity for permitted development may be considered, including but not limited to, (a) construction of a package treatment plant at the Seaside treatment facility to handle all projected sewage for the City's LUP land use designations; or (b) the construction of a new sewer line to the Monterey treatment facility to handle the same sewage capacities. | The intent of this policy is to ensure sewage treatment facilities do not violate Regional Water Quality Control Board standards, have sufficient capacity for new users and minimize the adverse effects to the environment. | Consistent: Development proposed for Seaside's coastal zone would not require wastewater collection and sewage treatment facilities. |
| City of Sand City | Sand City Local Coastal Program Land Use Plan | Coastal Visual Resources | Transmission Main, Transfer Pipeline, Monterey Pipeline | ***LCP Policy 5.3.4***<br>***Signs and Utilities***<br>***W.*** Utility lines shall be placed underground wherever possible. | This policy is intended to minimize visual and other adverse effects of above-ground utility lines. | Consistent: Development proposed within Sand City's coastal zone would be buried below ground surface. |
| County of Monterey | Monterey County General Plan | Public Services | All project components | ***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. | This policy is intended to prevent overdrawing of the aquifers. | Consistent: The proposed project is being planned in coordination with public water service providers in the region and includes measures to prevent overdrawing the water table. |
| County of Monterey | Monterey County General Plan | Public Services | All project components | ***Policy PS-5.5*****:** The County shall promote waste diversion and recycling and waste energy recovery. | This policy is intended to reduce waste. | Consistent: The proposed proposed project would be required to comply with State and local regulations that require waste diversion and recycling. |
| County of Monterey | Monterey County General Plan | Public Services | All project components | ***Policy PS-13.2*****:** All new utility lines shall be placed underground, unless determined not to be feasible by the Director of the Resource Management Agency. | This policy is intended to minimize visual and other adverse effects of above-ground utility lines. | Consistent: The proposed project includes underground water conveyance pipelines. New underground and aboveground powerlines would be constructed between existing powerlines in the area and the proposed project facilities. It is anticipated that most, if not all, of the new powerlines would be constructed underground. |

SOURCES: City of Marina, 2000; City of Sand City, 2002; City of Seaside, 2004; Monterey County, 2010.

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# 4.13.3 Impacts and Mitigation Measures

## 4.13.3.1 Significance Criteria

In accordance with Appendix G of the CEQA Guidelines, the project would have a significant impact on public services and utilities if it would:

- Result in the 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 public services such as fire and police protection, schools, parks, or other public facilities;
- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- Require or result in the construction of new water or wastewater treatment facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects;
- Require or result in the construction of new stormwater drainage facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects;
- Have insufficient water supply available to serve the project from existing entitlements and resources or require new or expanded water supply resources or entitlements;
- Result in a determination by the wastewater treatment provider that it has inadequate capacity, including treatment and/or outfall capacity, to accommodate the project's projected demand;
- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- Be out of compliance with federal, state, and local statutes and regulations related to solid waste.

In addition to the above-listed CEQA significance criteria, the EIR preparers developed two additional significance criteria to capture the full range of potential project effects. These criteria are also employed in the impact analyses in Sections 4.13.3.4 and 4.13.3.5, below. The proposed project would have a significant impact on public services and utilities if it would:

- Disrupt operations or require relocation of regional or local utilities; or
- Generate wastewater flows that would increase the corrosion of the existing MRWPCA outfall and diffuser

Due to the nature of the proposed project, the following criteria are not addressed in the impact analysis for the reasons described below:

> ***Result in the need for new or physically altered governmental facilities.*** During the 30-month construction period, up to 400 construction workers would be employed at the various construction sites, depending on the phase of construction and the construction

activities taking place. It is expected that construction workers could come from any part of the region. While it is possible that some workers might temporarily relocate from other areas, the proposed project would not substantially increase the local population. During project construction, incidents requiring law enforcement, fire protection, or emergency services could occur; however, any temporary increase in incidents would not exceed the capacity of local service providers to a degree that required new or expanded facilities. Any temporary increase in the local population during project construction would be negligible and could be accommodated by existing service providers. Therefore, construction of the proposed project would not result in impacts related to the need for new or physically altered governmental facilities in order to maintain existing levels of public services, and no impacts related to public services would occur.

The proposed project would not permanently increase the local population. Operation and post-construction maintenance activities would require approximately 25 to 30 permanent employees and would not substantially increase the demand for public services, including fire and police protection, libraries, schools, hospitals, or other services. Therefore, no impacts related to public services would occur during project operations.

Because there would be no construction or operational impacts, the criterion related to the need for new or modified governmental facilities is not applicable to the project and is not discussed further. The potential impact related to impaired emergency access during construction is addressed under Impact 4.9-4 in Section 4.9, Traffic and Transportation.

***Require or result in the construction of new water treatment facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects.*** As described in Chapter 3, Project Description, Section 3.3.2, Project Objectives, the purpose of the MPWSP is to provide a new potable water supply source to serve the CalAm Monterey District service area. The construction of water-related facilities, including the MPWSP Desalination Plant, is the subject of this EIR. This chapter (Chapter 4, Environmental Setting, Impacts, and Mitigation Measures) discusses the potential impacts and identified mitigation measures associated with these facilities.

***Require or result in the construction of new stormwater drainage facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects.*** The potential for the proposed project to change drainage patterns and increase stormwater runoff is addressed in Section 4.3, Surface Water Hydrology and Water Quality (see Impacts 4.3-6 and 4.3-7). That analysis indicates that, due to the negligible increase in impervious surfaces associated with the proposed aboveground facilities, the proposed project would have a less than significant impact associated with potential changes in drainage patterns and the rate and amount of surface runoff. As a result, the proposed project would not require or result in the need for new or expanded stormwater drainage facilities. No impact would result and this impact is not discussed further.

***Have insufficient water supply available to serve the project or require new or expanded water supply resources or entitlements.*** Project implementation would generate approximately 25 to 30 permanent jobs in the Monterey District service area. The proposed project would not construct new housing, nor would it substantially increase the number of permanent workers in the area. No substantial changes in water demand or water distribution would result. Further, the purpose of the MPWSP is to provide a new potable water supply source to serve the CalAm Monterey District service area and the implementation of this new water supply is the subject of this EIR. Therefore, this criterion is not applicable to the project and is not discussed further in this section. Refer to Chapter 2, Water Demand, Supplies, and Water Rights, for a discussion of water rights and Section 4.4, Groundwater Resources, for an

analysis of the proposed project's effects on existing groundwater users in the Seaside Groundwater Basin and the Salinas Valley Groundwater Basin.

## 4.13.3.2 Approach to Analysis

Streets and trails through the project area function as underground utility corridors. Several impacts of the MPWSP related to public services and utilities stem from the potential for project construction to directly impact utilities and utility services. Therefore, the analysis of project impacts in Sections 4.13.3.4 and 4.13.3.5, below, focuses on impacts to utilities, although potential impacts related to public services are also addressed.

For purposes of analysis, this EIR uses the California Department of Transportation (Caltrans) policy in the *Caltrans Project Development Procedures Manual* (Caltrans, 1999) to identify "high risk" utilities that would pose a greater risk to workers and the public should an accident occur during construction, and which therefore warrant special consideration. Pursuant to the policy, high risk utilities include pipelines carrying petroleum products, oxygen, chlorine, toxic or flammable gases; natural gas in pipelines greater than 6 inches nominal pipe diameter or with normal operating pressures greater than 60 pounds per square inch gauge; and underground electric supply lines, conductors, or cables that have a potential to ground more than 300 volts, either directly buried or in duct or conduit, and which do not have effectively grounded metal shields or sheaths (Caltrans, 1999).

## 4.13.3.3 Summary of Impacts

**Table 4.13-5** summarizes the proposed project's impacts and significance determinations related to public services and utilities.

**TABLE 4.13-5**
**SUMMARY OF IMPACTS – PUBLIC SERVICES AND UTILITIES**

| Impacts | Significance Determinations |
|---|---|
| **Impact 4.13-1:** Disrupt or relocate regional or local utilities during construction. | LSM |
| **Impact 4.13-2:** Exceed landfill capacity or be out of compliance with federal, state, and local statutes and regulations related to solid waste during construction. | LSM |
| **Impact 4.13-3:** Exceed landfill capacity or be out of compliance with federal, state, and local statutes and regulations related to solid waste during operations. | LS |
| **Impact 4.13-4:** Result in effects from construction of new wastewater treatment or conveyance facilities or the expansion of existing facilities, exceed wastewater treatment requirements of the Central Coast RWQCB, or result in a determination by the wastewater treatment provider that it has inadequate treatment or outfall capacity to serve the project. | LSM |
| **Impact 4.13-5:** Increased corrosion of the MRWPCA outfall and diffuser as a result of brine discharges associated with project operations. | LSM |

LS = Less than Significant impact, no mitigation required
LSM = Less than Significant impact with Mitigation

## 4.13.3.4 Construction Impacts and Mitigation Measures

### Impact 4.13-1: Disrupt or relocate regional or local utilities during construction. (*Less than Significant with Mitigation*)

#### All Project Facilities

Construction of the MPWSP could damage or interfere with existing water, sewer, stormwater drainage, natural gas, electric, or communication lines. Construction could require the permanent relocation of these utility lines, potentially interrupting service if the lines could not be avoided. Numerous public utilities of varying sizes are present in the project area.

Streets and roads typically serve as utility corridors, increasing the potential for project components to interfere with existing utilities. As such, overhead utility lines of various sizes are likely to be located along or across several project components. Overhead utility poles and lines could be susceptible to accidental damage from the movement of large construction equipment and vehicles throughout the project area. Trenching, excavation, and pipeline installation are the activities most likely to result in planned or accidental service disruptions, as the proposed pipeline alignments would probably cross multiple underground utilities. In most cases, service disruptions would be temporary and typically would not exceed 1 day. The proposed pipeline alignments could cross stormwater pipes, culverts, natural gas lines, sewer lines, and water pipelines.

Accidental rupture of or damage to utility lines during project construction could temporarily disrupt utility services and, in the case of high-risk utilities (also referred to as high-priority utilities[2]), such as high-pressure gas pipelines, could result in significant safety hazards for construction workers. For these reasons, impacts on existing utilities and utility services during project construction would be potentially significant. However, the impact would be reduced to a less-than-significant level with implementation of **Mitigation Measures 4.13-1a (Locate and Confirm Utility Lines)**, **4.13-1b (Coordinate Final Construction Plans with Affected Utilities)**, **4.13-1c (Safeguard Employees from Potential Accidents Related to Underground Utilities)**, **4.13-1d (Emergency Response Plan)**, **4.13-1e (Notify Local Fire Departments)**, and **4.13-1f (Ensure Prompt Reconnection of Utilities)**. These mitigation measures would require the construction contractor(s) to: confirm the location of existing utilities and mark the confirmed locations accurately on the final construction drawings; work with utility service providers to minimize the risk of damage to existing utility lines and ensure prompt reconnection of service in the event of a service disruption; take special precautions when working near high-risk utility lines, including tailgate meetings with contractor staff on days when work will occur near high risk (high priority) utilities; clearly outline the procedures to follow in the event of a leak or explosion; and immediately notify local fire departments of any damage to high-risk utility lines.

[2] Consistent with California Government Code Section 4216(e), high priority utilities include natural gas pipelines carrying petroleum with normal operating pressures greater than 415kPA (60 pounds per square inch gauge); petroleum pipelines; pressurized sewage pipelines; high voltage electric supply lines, conductors, or cables that have a potential to ground of greater than 60 kv; and hazardous materials pipelines that are potentially hazardous to workers or the public if damaged. For purposes of this analysis, high priority utilities also include underground electric supply lines, conductors, and cables that have a potential to ground more than 300 volts, either directly buried or in duct or conduit, and which do not have effectively grounded metal shields or sheaths. The latter is consistent with Caltrans' Policy on High and Low Risk Underground Facilities within Highway Rights-of-Way (Caltrans, 1999).

#### Land Use Plans & Policies Consistency

In addition to the impact described above, as noted in **Table 4.13-4**, project construction could conflict with applicable land use policies. Specifically, the potential for construction of the Transmission Main, Transfer Pipeline, and Monterey Pipeline to conflict with Seaside General Plan policy LU-6.1 which was established to maintain existing sewer systems. As discussed in the preceding paragraphs, implementation of **Mitigation Measures 4.13-1a** through **4.13-1f** would reduce the potential for project construction to disrupt existing utilities within Seaside.

#### Impact Conclusion

This impact would be significant for all project components but would be reduced to a less-than-significant level with implementation of **Mitigation Measures 4.13-1a** through **4.13-1f**.

### *Mitigation Measures*

*Mitigation Measure 4.13-1a applies to all project components.*

> **Mitigation Measure 4.13-1a: Locate and Confirm Utility Lines.**
>
> Before excavation begins, CalAm or its contractor(s) shall locate all overhead and underground utility lines (such as natural gas, electricity, sewage, telephone, fuel, and water lines) that are reasonably expected to be encountered during excavation. When a project excavation is within the approximate location of a subsurface utility, CalAm or its contractor shall determine the exact location of the underground utility by safe and acceptable means, including with the use of hand tools and modern techniques. Information regarding the size, color, and location of existing utilities shall be confirmed before construction activities begin. These utilities shall be highlighted on all construction drawings.

*Mitigation Measure 4.13-1b applies to all project components.*

> **Mitigation Measure 4.13-1b: Coordinate Final Construction Plans with Affected Utilities.**
>
> CalAm or its contractors shall coordinate final construction plans, schedule, and specifications with affected utilities. Arrangements shall be made with these entities regarding the appropriate protection, relocation, or temporary disconnection of services. If any interruption of service is required, CalAm or its contractor(s) shall notify residents and businesses in the project corridor of any planned utility service disruption 2 to 4 days in advance, in conformance with county and state standards.

*Mitigation Measure 4.13-1c applies to all project components.*

> **Mitigation Measure 4.13-1c: Safeguard Employees from Potential Accidents Related to Underground Utilities.**
>
> When any excavation is open, the construction contractor(s) shall protect, support, or remove underground utilities as necessary to safeguard employees.
>
> As part of contractor specifications, the contractor(s) shall be required to provide weekly updates to CalAm and construction workers regarding the planned excavations for the upcoming week, and to specify when construction will occur near a high-priority utility

(i.e., pipelines carrying petroleum products, oxygen, chlorine, or toxic or flammable gases; natural gas pipelines greater than 6 inches in diameter or with normal operating pressures greater than 60 pounds per square inch gauge; and underground electric supply lines, conductors, or cables that have a potential to ground more than 300 volts that do not have effectively grounded sheaths). CalAm's construction managers shall hold regular tailgate meetings with construction staff on days when work near high-priority utilities occurs to review all safety measures—including those identified in the Mitigation Monitoring and Reporting Program and in construction specifications—regarding such excavations. The contractor shall designate a qualified Health and Safety Officer that shall specify a safe distance to work near high-priority utilities. Excavation near such utility lines shall not be authorized until the designated Health and Safety Officer confirms and documents in the construction records that: (1) the line was appropriately located in the field by the utility owner using as-built drawings and a pipeline-locating device, and (2) the location was verified by hand by the construction contractor.

*Mitigation Measure 4.13-1d applies to all project components.*

**Mitigation Measure 4.13-1d: Emergency Response Plan.**

Before construction begins, CalAm or its contractor(s) shall develop an emergency response plan that outlines procedures to follow in the event of a leak or explosion. The emergency response plan shall identify the names and phone numbers of staff at the potentially affected utilities that would be available 24 hours per day in the event that construction activities cause damage to or rupture of a high-risk utility. The plan shall also detail emergency response protocols, including notification, inspection, and evacuation procedures; any equipment and vendors necessary to respond to an emergency (such as an alarm system); and routine inspection guidelines.

*Mitigation Measure 4.13-1e applies to all project components.*

**Mitigation Measure 4.13-1e: Notify Local Fire Departments.**

CalAm or its contractor(s) shall notify local fire departments any time damage to a gas utility results in a leak or suspected leak, or whenever damage to any utility results in a threat to public safety.

*Mitigation Measure 4.13-1f applies to all project components.*

**Mitigation Measure 4.13-1f: Ensure Prompt Reconnection of Utilities.**

CalAm or its contractor(s) shall promptly contact utility providers to reconnect any disconnected utility lines as soon as it is safe to do so.

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

### All Project Facilities

Construction of the proposed project would generate approximately 35,225 cubic yards (or 52,837 tons[3]) of excess spoils and construction debris. Most construction debris would consist of spoils, rock, and other excavated materials. Due to the economic value of clean excavated soil and the cost of landfill disposal, it is expected that much of the excavated materials would be diverted for reuse. Nevertheless, this analysis conservatively assumes that all excess spoils and construction debris would be disposed of at the Monterey Peninsula Landfill.

The Monterey Peninsula Landfill is permitted to receive 3,500 tons of waste per day. The landfill has an estimated remaining capacity of 48,560,000 cubic yards and an expected site life of approximately 100 years (CalRecycle, 2013). According to the Monterey Regional Waste Management District, the landfill receives an average of approximately 300,000 tons per year, or less than 1,000 tons per day (MRWMD, 2013b).

Based on the assumption that excess spoils and construction debris would be hauled to the landfill Monday through Friday over the 30-month construction duration, project construction could generate up to 102 tons per day of materials requiring disposal. Even under this worst-case scenario, the waste generated by project construction, in combination with the landfill's average acceptance rate of less than 1,000 tons per day, would be well below the landfill's permitted daily acceptance rate of 3,500 tons. The total amount of excess spoils and construction debris generated by the project represents approximately 0.07 percent of the landfill's remaining capacity. Therefore, even under the worst-case scenario that assumes all of the proposed project's excess spoils and construction debris would be disposed of at the Monterey Peninsula Landfill, the amount of waste by project construction would not exceed or substantially deplete the landfill capacity. However, failing to divert a substantial portion of the waste generated during project construction could conflict with county and local diversion goals and policies, and could adversely affect the jurisdictions' waste diversion rates.

As discussed in Section 4.13.2, Regulatory Framework, the California Integrated Waste Management Act of 1989 requires all California cities and counties to implement programs to reduce, recycle, and compost at least 50 percent of waste and the Monterey County Integrated Waste Management Plan has incorporated provisions of the California Green Building Standards Code, calling for non-residential projects to recycle and/or salvage for reuse of at least 50 percent of nonhazardous construction and demolition waste and that 100 percent of trees, stumps, rocks, and associated vegetation and soil from land clearing be reused or recycled (unless contaminated with disease or pest infestation).

Failure of CalAm's construction contractor(s) to reuse or recycle excavation materials and other construction waste generated during MPWSP construction would thus conflict with the policies

[3] Based on a conversion factor of 1.5 tons per cubic yard.

of the County's Integrated Waste Management Plan adopted to protect the environment, and could also adversely affect the state-mandated diversion rates of the jurisdictions in which construction activities would be located; this would be a significant impact.

This impact would be reduced to a less-than-significant level with implementation of **Mitigation Measure 4.13-2 (Construction Waste Reduction and Recycling Plan)**. This measure would require CalAm's construction contractor(s) to prepare a plan identifying the types of debris that would be generated by the project and the manner in which these waste streams would be handled to divert recoverable materials from landfills.

#### Impact Conclusion

Even under the worst case scenario that assumes all of the proposed project's excess spoils and construction debris would be disposed of at the Monterey Peninsula Landfill, the amount of waste by project construction would not exceed or substantially deplete the landfill capacity. However, disposal and management of wastes generated during project construction could be out of compliance with state and local regulations and policies calling for the diversion of construction waste from landfill disposal, a significant impact. However, the impact would be mitigated to a less-than-significant level for all project facilities with implementation of **Mitigation Measure 4.13-2 (Construction Waste Reduction and Recycling Plan)**, which requires that CalAm's construction contractor(s) prepare a construction waste reduction and recycling plan identifying the types of debris the proposed project will generate and the manner in which those waste streams will be handled to ensure consistency with applicable regulations and policies.

### *Mitigation Measure*

*Mitigation Measure 4.13-2 applies to all project components.*

> **Mitigation Measure 4.13-2: Construction Waste Reduction and Recycling Plan.**
>
> The construction contractor(s) shall prepare a construction waste reduction and recycling plan identifying the types of debris the proposed project will generate and the manner in which those waste streams will be handled. In accordance with the California Integrated Waste Management Act of 1989, the plan shall emphasize source reduction measures, followed by recycling and composting methods, to ensure that construction and demolition waste generated by the project is managed consistent with applicable statutes and regulations. In accordance with the California Green Building Standards Code and local regulations, the plan shall specify that all trees, stumps, rocks, and associated vegetation and soils, and 50 percent of all other nonhazardous construction and demolition waste, be diverted from landfill disposal. The plan shall be prepared in coordination with the Monterey Regional Waste Management District and be consistent with Monterey County's Integrated Waste Management Plan. Upon project completion, CalAm shall collect the receipts from the contractor(s) and submit them to the CPUC as documentation that the waste reduction, recycling, and diversion goals have been met.

## 4.13.3.5 Operational Impacts and Mitigation Measures

**Impact 4.13-3: Exceed landfill capacity or be out of compliance with federal, state, and local statutes and regulations related to solid waste during operations. (*Less than Significant*)**

### MPWSP Desalination Plant

Operation of the MPWSP Desalination Plant would produce approximately 20,000 pounds of residual solid waste per day through the desalination process. These would be dewatered onsite, resulting in approximately 5 cubic yards per day (or 7.5 tons) of "cake" requiring disposal at the Monterey Peninsula Landfill. The solids would contain naturally occurring organic and inorganic matter from the raw seawater, iron precipitated from coagulation during the pretreatment process, and low concentrations of other chemicals used in the treatment process. Although the solids are unlikely to be categorized as hazardous, the solids would be tested prior to landfill disposal to ensure they meet nonhazardous waste disposal criteria. There are no known opportunities for reusing or recycling these solids, so diverting them from landfill disposal is not an option. Because the landfill operates 6 days per week, the 52.5 tons of sludge cake generated per week by the desalination process would result in a daily disposal rate of approximately 8.75 tons (i.e., assuming disposal 6 days per week). The administrative activities at the plant would generate nominal amounts of typical office wastes.

The Monterey Peninsula Landfill is permitted to accept up to 3,500 tons per day but, on average, receives less than 1,000 tons per day (CalRecycle, 2013; MRWMD, 2013b); therefore, the landfill could accept the 8.75 tons of waste generated by the MPWSP Desalination Plant without exceeding its permitted daily tonnage or depleting substantial long-term capacity. As a result, operation of the proposed MPWSP Desalination Plant would have a less-than-significant impact related to landfill capacity and solid waste disposal.

### ASR Pump-to-Waste System

Maintenance of the ASR Pump-to-Waste System is expected to generate approximately 240 pounds (less than 1 ton) per year of sediment. This material would be taken to the Monterey Regional Waste Management District's materials recovery facility for recycling and reuse. Therefore, no impacts related to landfill capacity and solid waste disposal are expected from operation of the proposed ASR Pump-to-Waste System.

### All Other Proposed Facilities

All other proposed project components (subsurface slant wells, conveyance pipelines, subsurface slate wells, storage facilities, pump stations, the interconnections with Highway 68 satellite systems and other ASR-related facilities) would have limited potential to generate waste during facility operations and maintenance, and any waste generated at these facilities would be nominal. Impacts associated with disposal of solid waste produced at these facilities would be less than significant.

### Impact Conclusion

MPWSP Desalination Plant operations would generate solid waste that would be routinely disposed of at the Monterey Peninsula Landfill. There are no known opportunities for reusing or recycling these solids, but the landfill could accept the waste without exceeding its permitted daily tonnage or substantially depleting long-term capacity. Maintenance of the ASR Pump-to-Waste System would generate sediment materials that would be taken to the Waste Management District's materials recovery facility for reuse or recycling. All other proposed facilities would have a very limited potential to generate waste during operations or maintenance. Impacts related to solid waste disposal and landfill capacity during operations and maintenance would be less than significant.

## *Mitigation Measures*

None required.

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**Impact 4.13-4: Result in effects from construction of new wastewater treatment or conveyance facilities or the expansion of existing facilities, exceed wastewater treatment requirements of the Central Coast RWQCB, or result in a determination by the wastewater treatment provider that it has inadequate treatment or outfall capacity to serve the project.** ***(Less than Significant with Mitigation)***

### Effects from Construction of New or Expanded Wastewater Treatment Facilities and Exceeding Wastewater Treatment Requirements

As discussed in Chapter 3, Project Description, brine generated during the desalination process at the MPWSP Desalination Plant would be discharged to Monterey Bay through the MRWPCA's existing ocean outfall and diffuser. During certain times of the year, particularly during the non-irrigation (wet) season, the brine stream would be blended with treated wastewater effluent from the MRWPCA Regional Wastewater Treatment Plant prior to discharge. The availability of wastewater effluent for blending with the brine is limited during the dry season (irrigation season) and the brine could be discharged without dilution for extended periods. The *Discharge Requirements for the Monterey Regional Water Pollution Control Agency Treatment Plant* [Order No. R3-2014-0013, NPDES Permit No. CA0048551), which regulates discharges from the outfall, would be amended before the MPWSP Desalination Plant comes into operation to incorporate the "brine only" and combined discharges. As described in Impact 4.3-4 in Section 4.3, Surface Water Hydrology and Water Quality, both the "brine only" discharges and the combined discharges would comply with Ocean Plan water quality objectives for all assessed constituents except PCBs and ammonia. The higher concentration of PCBs and ammonia resulting from the brine-only discharge and the combined discharge with 0.25 million gallons per day (mgd) wastewater flow would be a function of their concentration in the source water, which gets further concentrated in the desalination process, and the dilution achieved by the discharges.

**Mitigation Measure 4.3-4 (Implement Measures to Avoid Exceedances over Water Quality Objectives at the Edge of the ZID)** is prescribed to reduce the water quality impact associated with exceedances of the Ocean Plan water quality objective for PCBs and ammonia to a less-

than-significant level. **Mitigation Measure 4.3-4** provides a menu of design features and operational protocols to be employed, individually or in combination, to reduce the concentration of PCBs to below the Ocean Plan water quality objectives at the edge of the Zone of Initial Dilution (ZID). The mitigation measure itself could have effects from implementation, which are described following the description of the measure. Refer to the discussion of the secondary impacts of **Mitigation Measure 4.3-4** at the end of Impact 4.3-4 for a description of the effects of construction associated with new wastewater treatment facilities that may be required to avoid exceedences of Ocean Plan constituents. These impacts would be less than significant.

#### Wastewater Treatment Plant and Outfall Capacity

The only wastewater generated during project operations that would require treatment at the MRWPCA Regional Wastewater Treatment Plant is wastewater from bathrooms at the MPWSP Desalination Plant. Given the small number of CalAm employees that would be staffed at the MPWSP Desalination Plant (25 to 30 employees), the volume of wastewater generated at this facility would be de minimus. None of the treatment processes at the MPWSP Desalination Plant site and none of the other proposed project facilities located elsewhere would generate wastewater during operations that would require treatment at the MRWPCA Regional Wastewater Treatment Plant. Therefore, project operations would not exceed wastewater treatment capacity.

The existing 2.1-mile-long, 60-inch-diameter MRWPCA outfall pipeline terminates at a 1,100-foot-long diffuser resting above the ocean floor at approximately 90 to 110 feet below sea level. The diffuser is equipped with 172 ports (120 ports are currently open and 52 are closed), each 2 inches in diameter and spaced 8 feet apart. Depending on the number of closed ports, the outfall and diffuser have a physical discharge capacity of between 66.5 and 94.6 mgd (Trussell Technologies, 2012). The outfall and diffuser are permitted to discharge up to 81.2 mgd in accordance with the *Waste Discharge Requirements for the Monterey Regional Water Pollution Control Agency Treatment Plant* (Order No. R3-2014-0013, NPDES Permit No. CA0048551) (RWQCB, 2014).

MRWPCA currently utilizes the existing ocean outfall and diffuser to discharge secondary treated wastewater effluent from the MRWPCA Regional Wastewater Treatment Plant to Monterey Bay. **Table 4.13-6** shows existing average monthly wastewater flows through the MRWPCA outfall and diffuser based on average monthly effluent discharges for the years 1998 through 2012. As shown, the volume of treated wastewater effluent varies throughout the year, with the highest flows occurring during the non-irrigation season (November through March). The lowest flows occur during the irrigation season (April through October) when a large portion of the secondary wastewater effluent from the MRWPCA Regional Wastewater Treatment Plant is diverted to the Salinas Valley Reclamation Project's tertiary treatment facility for additional advanced treatment and subsequently used for crop irrigation as part of the CSIP.

The MPWSP Desalination Plant would generate approximately 13.98 mgd of brine (including 0.4 mgd of decanted backwash effluent) that would be discharged through the MRWPCA's existing ocean outfall and diffuser. The amount of treated wastewater effluent available for blending with

the brine stream would be highly variable throughout the year, and the brine stream could be discharged with minimal dilution for extended periods. As shown in **Table 4.13-6**, based on average monthly flows, both the "brine only" flows and the combined discharges would remain below the MRWPCA's permitted discharge capacity of 81.2 mgd throughout the year. An outfall capacity evaluation conducted in 2012 (Trussell Technologies, 2012) indicates that even under the worst- case conditions when additional ports are closed and outfall capacity is reduced to 41.1 mgd, the outfall has sufficient capacity to accommodate brine stream.

**TABLE 4.13-6**
**BRINE STREAM AND TREATED WASTEWATER EFFLUENT FLOWS THROUGH THE MRWPCA OUTFALL AND DIFFUSER**

| | Average Monthly Flows (mgd) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sept** | **Oct** | **Nov** | **Dec** |
| Brine Stream from MPWSP Desalination Plant | 13.98 | 13.98 | 13.98 | 13.98 | 13.98 | 13.98 | 13.98 | 13.98 | 13.98 | 13.98 | 13.98 | 13.98 |
| Treated Wastewater Effluent from MRWPCA[a] | 19.78 | 18.41 | 14.68 | 7.02 | 2.40 | 1.89 | 0.90 | 1.03 | 2.79 | 9.89 | 17.98 | 19.27 |
| Combined Discharge | 33.76 | 32.39 | 28.66 | 21.00 | 16.38 | 15.87 | 14.88 | 15.01 | 16.77 | 23.87 | 31.96 | 33.25 |

NOTES:

[a] Based on average monthly effluent discharges for the years 1998 through 2012.

SOURCES: RBF Consulting, 2013; MRWPCA, 2013b.

Maximum instantaneous flows measured in the outfall between 1998 and 2012 (MRWPCA, 2013b) ranged from 40.4 mgd to 59.9 mgd. This data indicates that even during peak storm events there would be sufficient capacity in the outfall to accept the brine generated by the MPWSP Desalination Plant year-round, assuming the existing outfall capacity of 81.2 mgd. However, as discussed in Section 3.6 of Chapter 3, Project Description, in the unlikely event that the brine stream, when combined with instantaneous peak flows of wastewater effluent from the MRWPCA Regional Wastewater Treatment Plant, exceeds the capacity of the outfall and diffuser during large storm events (i.e., if outfall ports are closed and overall outfall capacity is reduced), CalAm would detain the brine at the proposed brine storage basin until sufficient capacity were available in the outfall for discharge. The 3-million-gallon brine storage basin has sufficient capacity to detain flows from approximately 5 hours of desalination plant operations. Based on previous studies prepared by Trussell Technologies that assumed up to 23.7 mgd of brine would be through the outfall (compared to 13.98 mgd under the MPWSP) and outfall capacity is reduced to 41.4 mgd, 5 hours of storage capacity would provide more than adequate storage during periods of peak effluent flow (Trussell Technologies, 2012). Thus, the impact related to outfall capacity would be less than significant.

### Impact Conclusion

As described in Impact 4.3-4 in Section 4.3, Surface Water Hydrology and Water Quality, both the "brine only" discharges and the combined discharges would comply with Ocean Plan water quality objectives for all assessed constituents except PCBs and ammonia. **Mitigation Measure 4.3-4** would reduce the water quality impact associated with exceedances of the Ocean Plan water quality objective for PCBs and ammonia to a less-than-significant level by providing a menu of design features and operational protocols to be employed, individually or in combination, to reduce the concentration of PCBs to below the Ocean Plan water quality objectives at the edge of the ZID. The effects of construction associated with new wastewater treatment facilities that may be required to avoid exceedences of Ocean Plan constituents are described in Section 4.3, following the description of the mitigation measure in Impact 4.3-4.

None of the treatment processes at the MPWSP Desalination Plant site and none of the other proposed project facilities would generate wastewater during operations that would require treatment at the MRWPCA Regional Wastewater Treatment Plant. Maximum instantaneous flows measured in the outfall between 1998 and 2012 (MRWPCA, 2013b) ranged from 40.4 mgd to 59.9 mgd indicating that even during peak storm events, there would be sufficient capacity in the outfall to accept the brine generated by the MPWSP Desalination Plant year-round. The operations of the proposed project would not result in inadequate capacity at the existing wastewater treatment plant or the existing outfall and the impact would be less than significant.

### *Mitigation Measures*

*Mitigation Measure 4.3-4 applies to MPWSP Desalination Plant operations.*

> **Mitigation Measure 4.3-4: Implement Measures to Avoid Exceedances over Water Quality Objectives at the Edge of the ZID.**
>
> (See Section 4.3, Surface Water Hydrology and Water Quality, for the description.)

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**Impact 4.13-5: Increased corrosion of the MRWPCA outfall and diffuser as a result of brine discharge associated with project operations. (*Less than Significant with Mitigation*)**

As discussed above under Impact 4.13-4, the MRWPCA utilizes the existing ocean outfall and diffuser to discharge secondary treated wastewater effluent from the MRWPCA Regional Wastewater Treatment Plant into Monterey Bay. The existing 60-inch-diameter MRWPCA outfall pipeline includes a 13,000-foot-long unlined segment on land, and a 9,880-foot-long unlined segment offshore. An unlined reinforced concrete junction box connects the land and offshore outfall segments (E2 Consulting Engineering, 2015). The outfall pipeline terminates at a 1,100-foot-long diffuser resting above the ocean floor at approximately 90 to 110 feet below sea level. Both the outfall pipeline and the diffuser have various cast iron and stainless steel fittings, bolts, valves, and appurtenances (CH2MHill, 2010). With implementation of the MPWSP, the brine produced during the reverse osmosis process at the MPWSP Desalination Plant would be conveyed to a brine mixing facility at the inland end of the land segment of the outfall, which is located at the MRWPC Regional Wastewater Treatment Plant, and would flow through the land

segment, junction box, and the offshore segment prior to exiting at the diffuser. An evaluation of the existing condition of the junction box offshore segment and the potential for increased corrosion of the offshore segment was recently completed by EC Consulting Engineering (2015) and is summarized below.

### MRWPCA Ocean Outfall – Offshore Segment

The assessment of the existing condition of the junction box and offshore outfall segment included field exploration, sampling, and laboratory testing of the samples. The laboratory results found the concrete strength to be excellent (over 7,500 pounds per square inch [psi] compared to designed compressive strength of 4,000 psi). The assessment concluded that, although chloride levels in the concrete samples were nine times the threshold for corrosion, the anaerobic environment present in the continuously exposed offshore segment of the outfall is the reason corrosion is not evident (i.e., there is no oxygen available for oxidation) (E2 Consulting Engineering, 2015).

The MPWSP Desalination Plant would generate approximately 13.98 mgd of brine (including 0.4 mgd of decanted waste effluent) that would be discharged through the MRWPCA's existing ocean outfall and diffuser. It is assumed that the amount of treated wastewater effluent available for blending with the brine stream would be highly variable throughout the year, and the brine stream could be discharged without dilution for extended periods. The salinity of the brine stream is estimated to range between approximately 57 and 58 parts per thousand (ppt), compared to the salinity of seawater in Monterey Bay, which ranges from 33.1 to 34.2 ppt (see Section 4.3, Surface Water Hydrology and Water Quality, for additional discussion regarding the water quality of existing discharges). The "brine only" discharges and combined discharges of brine and wastewater effluent would expose submerged metals and concrete in the outfall and diffuser to high salinity water.

The 2015 assessment of the MRWPCA junction box and offshore outfall segment conducted by E2 Consulting Engineering included evaluation of the corrosion potential associated with the introduction of brine from the MPWSP Desalination Plant. The study concluded that corrosion of the outfall, even with increased chloride concentrations from the brine, would continue to be controlled by the availability, or lack, of oxygen. The assessment concluded that the existing outfall pipeline could accept the brine stream from the MPWSP Desalination Plant without serious deterioration and that the reinforcing steel in the pipe would continue to be protected from corrosion by the anaerobic environment of its immersion, which precludes the introduction of oxygen into the steel/concrete interface. Even with the increased chloride concentrations from the brine, the outfall could be expected to live up to its original intended life expectancy provided oxygen is not introduced into the discharges and anaerobic conditions remain. However, the existing junction box at the shoreline and approximately the first 100 feet of the offshore pipeline is a region where some turbulence might be expected to occur, which could introduce oxygen into the system. The assessment recommended that the junction box and 100-foot-long segment of pipeline be lined to ensure any oxygen introduced by turbulence does not cause corrosion (E2 Consulting Engineering, 2015). The potential for increased corrosion of the junction box and the first 100 feet of offshore outfall pipeline is considered a significant impact. However, with implementation of **Mitigation**

**Measure 4.13-5a (Installation of Protective Lining, Periodic Inspections, and As-Needed Repairs for Offshore Segment of MRWPCA Ocean Outfall)**, which require the application of a protective epoxy coating along the junction box and first 100 feet of the offshore outfall pipeline and periodic inspections of the outfall thereafter, the impact would be reduced to a less-than-significant level.

#### MRWPCA Ocean Outfall – Land Segment

An evaluation of the 13,000-foot-long land segment similar to the evaluation that was conducted for the offshore segment is planned but has not yet been conducted (E2 Consulting Engineering, 2015). However, due the aerobic conditions in the land segment, it is anticipated that the proposed discharges of brine from the MPWSP Desalination Plant would accelerate corrosion of the land segment, and this is considered a significant impact. However, with implementation of **Mitigation Measure 4.13-5b (Assess Land Segment of MRWPCA Ocean Outfall and Install Protective Lining, If Needed)**, which requires assessment of the full length land segment and, if needed, the phased application of a protective epoxy coating along all or part of the 13,000-foot-long land segment, the impact would be reduced to a less-than-significant level. Thereafter, periodic inspections of the land segment would be performed to ensure the continued integrity of the segment.

### *Mitigation Measures*

*Mitigation Measure 4.13-5a applies to discharges of brine from the MPWSP Desalination Plant.*

> **Mitigation Measure 4.13-5a: (Installation of Protective Lining, Periodic Inspections and As-Needed Repairs for Offshore Segment of MRWPCA Ocean Outfall.**
>
> To protect the offshore segment of the MRWPCA ocean outfall from corrosion, CalAm shall enter into an agreement with MRWPCA to line the junction box and 100-foot-long segment of outfall pipeline with a marine epoxy coating, Raven 405 or equivalent, sprayed to a minimum of 80 millimeters wet film to a thickness.
>
> Installation of the lining shall occur during the irrigation season (April through September), when nearly all of the wastewater effluent is diverted to the Salinas Valley Reclamation Plant to produce recycled water for irrigation and very limited flows are discharged via the MRWPCA ocean outfall. As recommended in the recent assessment of the offshore segment (EC Consulting Engineering, 2015), the junction box and initial portion of the offshore segment would be temporarily plugged at the landward end using a large football shaped balloon inserted just beyond Station 1+00. The junction box and portion of the segment would then be dewatered by pumping all water out on the landward side of Station 1+100. The dewatered portion of the segment and junction box would be allowed to dry for 48 hours. The interior of the junction box and offshore segment would then be sprayed with the epoxy coating. Once the coating is applied, the balloon plug would be deflated and removed so that the outfall can be brought back into operation.
>
> Installation of the epoxy lining would take place in a very short timeframe of approximately 7 to 10 days. The minimal amount of MRWPCA effluent that must be diverted while the outfall segment is plugged for epoxy installation shall be collected upstream of the balloon plug via large hose or flexible pipe. This hose or pipe will transfer

the effluent up through the junction box and out to an in-place gutter located forward of the junction box and facing the beach. Prior to installation of the lining, CalAm shall obtain approval from the RWQCB for the temporary diversion of the treated effluent to the in-place gutter.

As recommended in the 2015 evaluation of the offshore portion of the MRWPCA outfall (E2 Consulting Engineering, 2015), CalAm shall enter into an agreement with MRWPCA to perform periodic inspections of the offshore portion of the MRWPCA outfall and diffuser. Annual inspections shall occur for the first three years after the MPWSP Desalination Plant is brought online. Thereafter, the offshore portion of the outfall shall be inspected every five years.

During each inspection, photo documentation should be provided for all areas of inspections, regardless of findings, to provide for photographic comparison over time. All inspections shall include documentation of the thickness of scaling, any exposure or corrosion of reinforcing steel, significant cracking or spalling of concrete, and any pitting of metals. Any necessary repairs to the outfall and/or diffuser shall be identified and performed.

*Mitigation Measure 4.13-5b applies to discharges of brine from the MPWSP Desalination Plant.*

**Mitigation Measure 4.13-5b: Assess Land Segment of MRWPCA Ocean Outfall and Install Protective Lining, If Needed.**

Prior to operation of the MPWSP Desalination Plant, CalAm shall coordinate with MRWPCA to assess the land segment of the ocean outfall. Like the evaluation conducted for the offshore segment, the evaluation of the land segment shall include field exploration, sampling, and laboratory testing and assess the existing condition of the land segment as well as the potential for brine discharges from the MPWSP Desalination Plant to accelerate corrosion of the land segment. If the existing condition of part or all of the land segment is such that brine discharge would accelerate corrosion and substantially decrease the life expectancy of the outfall due to corrosion of the land segment, CalAm shall enter into an agreement with MRWPCA to line the part or all of the land segment with a protective epoxy coating similar to that prescribed in **Mitigation Measure 4.13-5b (Protective Lining for Offshore Segment of MRWPCA Ocean Outfall)**.

Installation of any needed epoxy lining shall occur during the irrigation season (April through September) when nearly all of the wastewater effluent flows are diverted to the Salinas Valley Reclamation Facility. For purposes of epoxy installation, the interior of the land segment may be accessed at six locations along the segment (three manholes at separate locations within the MRWPCA treatment plant, an air relief in the middle of Armstrong Ranch, an inspection manhole just west of the bike trail west of Del Monte Boulevard and the junction structure near the ocean). Any epoxy needed would be installed in phases using the nearest interior access point. The small amount of effluent flowing through the portion of the land segment to be epoxied would be plugged and dewatered as described below**.** The plugged portion of the segment would be allowed to dry for 48 hour and then the epoxy lining would be installed. As discussed in **Mitigation Measure 4.13-5a** above, installation in a given portion of the land segment would take approximately 7 to 10 days. Installation of epoxy lining within the entire land segment (if necessary) would take approximately 4 to 6 months (and thus would be completed within the April through September irrigation season).

When any needed epoxy lining is being installed in a portion of the land segment, the small amount of effluent flowing through the affected portion will be diverted by inserting a hose or flexible pipe into the interior access point above the affected portion and running that hose or pipe along the surface to discharge into the next downstream access point. The final access point would be the junction box at the head of the offshore segment of the ocean outfall. In other words, the surface hose or pipe will act as a temporary bridge along the land segment carrying effluent from above the plugged portion of the segment where epoxy lining is being installed to the next access point downstream of the work area. Because all effluent will continue to discharge into the junction box during epoxy installation, no new RWQCB discharge permit is required. However, CalAm shall obtain RWQCB approval to temporarily run the hose along the ground surface.

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