

4.18 WATER SUPPLY AND WASTEWATER SYSTEMS

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4.18.1 Introduction

This section provides information on the water supply and wastewater systems in the Proposed Project area and discusses impacts on these systems due to implementation of the Proposed Project. This section provides the setting, regulatory framework, and impacts that would apply to components of the Proposed Project related to water supply/demand and wastewater collection and treatment. This section also provides an overview of water rights and agreements underlying the use of water and wastewater resources proposed for source waters for this project, and also summarizes the technical reports that evaluated the availability of Proposed Project source waters.

Comments received during Scoping. Public and agency comments related to water supply and wastewater that were received during the public scoping period in response to the Notice of Preparation are summarized below:

- Effects of discharges of byproducts from the advanced water treatment facility and secondary wastewater on disposal capacity and permit compliance of the existing outfall, including previous agreements that may commit outfall capacity.
- Availability of, and legal rights to, use of source waters and wastewater, including agreed upon recycled water capacity and rights of the Marina Coast Water District.
- Confirmation that there is sufficient source water and wastewater to meet the agricultural community water needs, required commitments through existing agreements as well as to provide water supplies to CalAm urban customers.
- Consideration of whether conservation measures would reduce the amount of MRWPCA Regional Treatment Plant inflow and assess MRWPCA's ability to produce continued supply of reclaimed wastewater for the project.

- Effect of increased recycling and reduction in agricultural and urban runoff on the supply of source water.
- Consideration of agricultural community's concerns that additional sources of water must be obtained in order to satisfy the desired amount of recycled water.
- Clarify whether source water would be from a single source or a combination of sources and delineate how the determination will be made, and when.

To the extent that issues identified in public comments involve potentially significant effects on the environment according to the California Environmental Quality Act (CEQA) and/or are raised by responsible agencies, they are identified and addressed within this EIR. For a complete list of public comments received during the public scoping period, refer to **Appendix A, Scoping Report**.

Other Water-related Issues in this EIR. Many of the issues related to water supply and wastewater service and facilities are addressed in other sections of the EIR. The following other sections provide information and impact analysis of other related topics.

- **Section 3, Water Quality Statutory and Regulatory Compliance Overview**, discusses how the Proposed Project would comply with standards and requirements for the protection of human health and the environment related to groundwater recharge of recycled water, including the quality of treated and recycled water for well injection.
- **Section 4.10, Hydrology and Water Quality: Groundwater** assesses the impacts of the Proposed Project on groundwater, including water levels, storage, and water quality in the aquifers in the project area.
- **Section 4.11, Hydrology and Water Quality: Surface Water**, addresses water quality and hydrology of surface water bodies, including regulatory requirements for dry and wet weather runoff, impacts to storm drain infrastructure and systems, flooding and inundation issues.
- **Section 4.13, Marine Biological Resources** assesses the impacts of discharging wastewater that is reverse osmosis by-product (i.e., concentrate) on marine water quality and biological resources
- **Section 4.15, Population and Housing** and **Section 5, Growth Inducement**, addresses whether the provision of new water supplies may induce population growth or demand for new housing.
- **Section 4.16, Public Services and Utilities**, addresses other public services and utilities, including fire and police protection, and solid waste.

Key Sources of Information. The information and analyses in this section are based on the following key technical analyses and agreements:

- Proposed Pure Water Monterey Groundwater Replenishment Project, Source Water Memorandum (Schaaf & Wheeler, 2015c); and Memorandum of Agreement Regarding Pure Water Monterey Groundwater Replenishment Project Source Waters and Water Recycling (signatories: MRWPCA, Monterey County Water Resources Agency, the City of Salinas, Marina Coast Water District, and Monterey Peninsula Water Management District), October 2014 provided in **Appendix B**.
- Monterey Regional Water Pollution Control Agency, 40-Year Wastewater Flow Projections Report 2014 – 2054 (Brezack & Associates, Inc., 2014) provided in **Appendix X**.

- Hydrology and water quality studies regarding source water yields and surface water impacts:
 - “Salinas River Inflow Impacts Report” (Schaaf & Wheeler, 2015a) This includes assessments of Salinas Industrial Wastewater Treatment Facility, southern Salinas urban runoff/stormwater and Blanco Drain Diversion and is provided in **Appendix O**.
 - “Reclamation Ditch Yield Study” (Schaaf & Wheeler, 2015b) assesses yield from the Reclamation Ditch system and is provided in **Appendix P**.
 - “Blanco Drain Yield Study” (Schaaf & Wheeler, 2014b) assesses yield from the Blanco Drain and is provided in **Appendix Q**.
 - “Groundwater Replenishment Project Urban Runoff Capture at Lake El Estero” (Schaaf & Wheeler, 2014a) assesses yield from Lake El Estero in Monterey, California and is provided in **Appendix R**.

4.18.2 Environmental Setting

This section describes the existing water supply and wastewater service facilities, service providers, applicable regulations, and legal agreements related to use of water resources. The study area for this section includes the project impact area shown in **Figure 2.18, Proposed Project Facilities Overview**, as well as the service areas of the relevant service providers. **Section 2.5, Overview of Existing Systems**, describes existing wastewater and water infrastructure systems that are relevant to the Proposed Project. **Section 2.7, Source Water**, provides details of the identified supplemental source waters to augment existing secondary-treated wastewater flows, which could be available to the Proposed Project, including urban stormwater and dry-weather runoff, surface water diversions from water bodies receiving agricultural tile drainage and surface runoff, and use of industrial wastewater currently treated by the City of Salinas. The existing conditions in this section are supplemental to the setting information and regulatory background presented in the **Chapter 2, Project Description**. **Table 4.18-1** lists water supply and wastewater service providers and management agencies by local jurisdiction.

Table 4.18-1

Water Supply and Wastewater Service Providers and Agencies

Jurisdiction	Monterey Regional Water Pollution Control Agency	Monterey County Water Resources Agency	Monterey Peninsula Water Management District	Monterey Peninsula Regional Water Authority	Seaside County Sanitation District	California American Water Company	California Water Services Company	Marina Coast Water District	City of Seaside Municipal Water System	Sand City Coastal Desalination Plant
Unincorporated Monterey County	✓	✓	✓	(1)		✓	✓	✓		
City of Salinas	✓	✓					✓			
City of Marina	✓	✓						✓		
City of Seaside	✓	✓	✓	✓	✓	✓		✓	✓	
City of Del Rey Oaks	✓	✓	✓	✓	✓	✓		✓		
City of Sand City	✓	(2)	✓	✓	✓	✓				✓
City of Monterey	✓	✓	✓	✓		✓		✓		
City of Pacific Grove	✓	(2)	✓	✓		✓				
Federal Lands	✓	✓	✓	✓	✓	✓		✓		
Notes: (1) Although this joint powers authority was established to coincide with CalAm's Monterey District, customers within the unincorporated areas of Monterey County do not have representation on the board. (2) These municipalities are within the Monterey County Water Resources Agency's jurisdiction for flood control; however, not for water supplies management.										

4.18.2.1 Potable Water Service

Potable water service to the project area is provided and/or managed by three public agencies, and delivery of water is provided by two public agencies and two private water companies as described below and summarized on **Table 4.18-1, Water Supply and Wastewater Service Providers and Agencies**.

Monterey Peninsula Water Management District

The Monterey Peninsula Water Management District (Water Management District) and MRWPCA are partners in studying the Proposed Project (Proposed Project). As indicated in **Section 2.3.2.1**, the Water Management District is a special district, created by the California Legislature in 1977 for the purposes of “conserving and augmenting the supplies by integrated management of ground and surface water supplies, for control and conservation of storm and wastewater, and for promotion of the reuse and reclamation of water.” Approximately 104,000 people live within the jurisdictional boundary of the Water Management District, which includes the Monterey Peninsula and unincorporated communities within Monterey County including Pebble Beach, the Carmel Highlands, a portion of Carmel Valley, and areas adjacent to Highway 68.

The Water Management District is a water resource planning/management entity, and does not provide water service to retail customers. Water Management District is responsible for

the integrated management of water resources within the Water Management District's boundaries, while the California American Water Company (CalAm) is responsible for providing water to customers in the Monterey Peninsula area. The Water Management District manages production and use of water from the Carmel River stored in Los Padres Reservoir, water production in the Carmel Valley aquifer, and groundwater pumped from municipal and private wells in Carmel Valley, the Seaside Groundwater Basin (Seaside Basin), and other areas within the Water Management District boundary. The Water Management District's jurisdictional area includes portions of watersheds and groundwater basins that lie partially outside the Water Management District political boundary.

The Water Management District regulates public fresh water supply systems within its boundaries, including systems owned by CalAm. The Water Management District also monitors the production of water from approximately 1,100 public and private wells, of which approximately 800 are currently active. The Water Management District provides technical support and regulatory oversight to CalAm and other smaller water systems, and has an ongoing program to mitigate the effects of pumping from the Carmel River system and the Seaside Basin.

The Water Management District also provides water conservation services to the Monterey Peninsula communities and Carmel Valley area. The Water Management District adopts and implements water conservation ordinances, determines drought emergencies and can impose rationing programs.

In addition to Water Management District's responsibilities to conserve and augment groundwater and surface water supplies, Water Management District is also responsible for administering water use permits for new and existing residential and non-residential uses. All property owners that seek to modify or add water fixtures within the Water Management District boundaries must obtain written authorization from the Water Management District. Water Management District generally issues permits when there is an available Water Management District water allocation within the particular jurisdiction or existing water credits are available to serve the proposed use. The Water Management District also regulates activities within the streamside corridor of the lower 15.5 miles of the Carmel River.

Monterey Peninsula Regional Water Authority

The Monterey Peninsula Regional Water Authority (MPRWA) is a Joint Powers Authority that consists of six cities, the Cities of Carmel-by-the-Sea, Del Rey Oaks, Monterey, Pacific Grove, Sand City and Seaside. The purpose is to study, plan, develop, finance acquire, construct, maintain, repair, manage, operate, control and govern water projects either alone or in cooperation with other public or private non-member entities. The Regional Water Authority adopted a Policy Position Statement on July 11, 2013 that establishes four basic criteria that any water project is expected to satisfy, as well as eight conditions that CalAm would have to meet in order to obtain Regional Water Authority support for a water supply project. The position statement expressed the Authority's support for a "portfolio approach" to water projects, which included the desalination option with groundwater replenishment.

Monterey County Water Resources Agency

The Monterey County Water Resources Agency (Water Resources Agency), formerly the Monterey County Flood Control and Water Conservation District, oversees the development and implementation of water quality, water supply, and flood control projects in Monterey County. Primary responsibilities are management of water supply resources in the Salinas

Valley reservoir system, including San Antonio and Nacimiento Reservoirs, and management and permitting of water projects in the Salinas Valley. Water Resources Agency is responsible for the regulation of water from the Salinas Valley Groundwater Basin and also manages release flows from San Antonio and Nacimiento reservoirs to provide groundwater recharge throughout the year.

The Water Resources Agency and its agency partners, including the MRWPCA, have two major capital projects that are managed to provide improvements to groundwater quality and reverse the long-term trend of seawater intrusion and groundwater level declines in the Salinas Valley Groundwater Basin. They include the Castroville Seawater Intrusion Project and the Salinas Valley Water Project. The Salinas Valley Water Project included reoperation of the Nacimiento and San Antonio reservoirs and construction and operation of a new seasonal diversion facility called the Salinas River Diversion Facility (or rubber dam). This facility has been providing river water for irrigation since 2010. The Castroville Seawater Intrusion Project provides treated (recycled) wastewater from the Regional Treatment Plant to agricultural growers in the unincorporated Castroville area of Monterey County.

Monterey County Department of Environmental Health

In addition to the water service providers described below, the Monterey County Department of Environmental Health oversees small public water supply systems. A “public water system” is a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year. The County Department of Environmental Health also issues well development and deconstruction permits, including for the Proposed Project injection and monitoring wells.

California American Water Company

As described in **Chapter 2, Project Description**, CalAm supplies water to most of the jurisdictions in the project area; CalAm’s service area is shown on **Figure 2.1** in **Section 2.0**. Cal-Am is an investor-owned utility that owns and operates wells, infrastructure, and water distribution systems that provide municipal water service to customers in the Monterey Peninsula area. Cal-Am operates a network of water facilities, including production wells, dams and associated reservoirs, and other conveyance infrastructure along the Carmel River, as well as an aquifer storage and recovery system in the Seaside groundwater basin. CalAm’s Monterey District includes a “main” system and several satellite systems, and has approximately 38,500 connections. CalAm provides water service to most of the Monterey Peninsula, including the cities of Carmel-by-the-Sea, Del Rey Oaks, Monterey, Pacific Grove, Sand City, and Seaside, and the unincorporated areas of Carmel Highlands, Carmel Valley, and Pebble Beach via the Monterey District’s water distribution system, known as the Main Monterey System. In addition to the main system, CalAm also operates the following satellite water systems that provide water to customers within Monterey County: Bishop/Pasadera, Ambler, Hidden Hills, Ryan Ranch, Toro, Chualar, and Ralph Lane.

CalAm’s Monterey District service area is supplied by the Carmel River system, groundwater from the coastal subareas of the Seaside Basin, and a small desal plant. The Bishop/Pasadera, Hidden Hills, and Ryan Ranch systems also rely on groundwater from the Seaside Basin. The remaining systems (Toro, Chualar, and Ralph Lane) do not rely on either the Carmel River or the Seaside Basin, but get their water supply from the Salinas Valley Groundwater Basin. As discussed in **Section 2.3.2.4**, the State Water Resources Control Board issued Order No. WR 95-10 in 1995, which found that CalAm was diverting more water from the Carmel River Basin than it was legally entitled to divert. The State

Board ordered CalAm to implement actions to terminate its unlawful diversions from the Carmel River and to maximize use of the Seaside Basin (to the extent feasible) to reduce diversions of Carmel River water. In 2009, the State Board issued a Cease and Desist Order (State Board Order Number WR 2009-0060) that requires CalAm to secure replacement water supplies for its Monterey District service area by January 2017 and reduce its Carmel River diversions to 3,376 AFY no later than December 31, 2016.

In addition, historical and persistent low groundwater elevations in the Seaside Basin caused by pumping have led to concerns that seawater intrusion may threaten the groundwater resources used by CalAm and others for water supply. Specifically, the Seaside Basin has experienced chronic overdraft conditions with declining water levels in both of the Basin's primary aquifers that are used for water supply (the deeper, confined Santa Margarita aquifer and the shallower, unconfined Paso Robles aquifer). In 2006, an adjudication process (CalAm v. City of Seaside et al., Case No. M66343) led to the issuance of a court decision that created the Seaside Groundwater Basin Watermaster (Watermaster). The Watermaster consists of nine representatives: one representative from each of CalAm, City of Seaside, Sand City, City of Monterey, City of Del Rey Oaks, Water Management District and Monterey County Water Resources Agency; and two representatives from landowner groups. The Watermaster has evaluated water levels in the basin and has determined that while seawater intrusion has not been observed, current water levels are lower than those required to protect against seawater intrusion. In 2012, water levels were found to be below sea level in the two primary aquifers within the Seaside Groundwater Basin; therefore, the Watermaster recognized that recharge into both aquifers would be beneficial for protection against seawater intrusion.

The adjudication requires CalAm to decrease its operating yield from the basin by 10% triennially until it reaches its allotted portion of the court-defined "natural safe yield" of 1,494 AFY beginning in 2021, as detailed in **Table 4.18-2, CalAm's Adjudicated Allocation of Native Seaside Ground Water Basin**. This natural safe yield was defined by the adjudication as the quantity of groundwater existing in the Basin that occurs solely as a result of natural replenishment. In addition to these reductions in pumping, CalAm is required to "pay back" historic over-pumping and plans to accomplish this by reducing its pumping from the Seaside Groundwater Basin by an additional 700 AFY for 25 years.

Table 4.18-2
CalAm's Adjudicated Allocation of Native Seaside
Groundwater Basin: Water Years 2006 – 2026 (in AFY)

Year	AFY
2006-2008	3,504
2009	3,191
2010-2011	3,087
2012-2014	2,669
2015-2017	2,251
2018-2020	1,820
2021-2023	1,494
2024-2026	1,494

Section 2.5.5 of Chapter 2, Project Description, describes CalAm's existing facilities, constraints on supplies, the amounts of water production (by water year), and the most recently data available regarding water demands (by calendar year).

Marina Coast Water District

Established in 1960, the Marina Coast Water District provides water supply and wastewater collection services for residents in the City of Marina and to lands in the former Fort Ord military base. Marina Coast Water District is a County water district formed and authorized by Division 12 of the California Water Code. Marina Coast Water District is located on the coast of Monterey Bay, and occupies an area of about 4.5 square miles. Marina Coast Water District's service area is shown on **Figure 4.18-1, Marina Coast Water District Boundaries and Services Areas**. In 1996, Marina Coast Water District was selected by the Fort Ord Reuse Authority (FORA) to take over conveyance of the water supply and wastewater systems at the former Ford Ord community, consisting of approximately 28,000 acres, including federal and state land, and portions of the cities of Seaside, Monterey, Del Rey Oaks, Marina and portions of unincorporated Monterey County. In November of 2001, water supply and wastewater systems were conveyed through a Public Benefit Conveyance to Marina Coast Water District. Marina Coast Water District is now responsible for providing water supply and wastewater collection service throughout the former Fort Ord military base through a contract.

The Marina Coast Water District's water supply comes from groundwater wells located in the 900-foot-deep aquifer of the Salinas Valley Groundwater Basin. The Marina Coast Water District also has a desalination plant with a capacity of 300 acre-feet per year; the plant is capable of providing up to 13 percent of the annual water demand, but has not operated in recent years (Marina Coast Water District, 2013).

Marina Coast Water District has an existing agreement in place with MRWPCA that entitles it to receive tertiary treated recycled water from the Regional Treatment Plant up to the volume of wastewater it conveys to the treatment plant. The Marina Coast Water District has an agreement with the Water Resources Agency that further sets the terms and conditions for purchasing recycled water from the Salinas Valley Reclamation Plant at the Regional Treatment Plant (Marina Coast Water District 1989, and Monterey County Water Resources Agency, et al. 1996). In February 2010, MRWPCA and Marina Coast Water District entered into an Outfall Agreement that defined the terms of use of the outfall by Marina Coast Water District for a planned desalination project. The Outfall Agreement is described below.

As indicated in **Section 2.3.3.3**, water demands on the former Fort Ord are projected to increase with development envisioned in the *Fort Ord Base Reuse Plan* and local plans. To address the need for additional water supply, Marina Coast Water District is developing the Regional Urban Water Augmentation Project (RUWAP) that would provide an additional 2,400 AFY of potable and/or recycled water. The RUWAP recycled water distribution system has been designed and partially constructed, but is not yet in operation. To date, the Marina Coast Water District has not delivered recycled water to its irrigation users from the Regional Treatment Plant. (See **Sections 4.18.2.2** and **4.18.3.4**, below, for further discussion of the Regional Treatment and Reclamation Plants and existing agreements.)

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 on the east side of the city along the west side of General Jim Moore Boulevard. The system includes one groundwater production well and two 500,000-gallon water tanks (City of Seaside, 2013).

Sand City Coastal Desalination Water System

The Sand City Coastal Desalination Plant, completed in April 2010, is owned by the Sand City and operated by CalAm. The Sand City Coastal Desalination Plant is capable of producing up to 300 acre-feet per year of potable water supplies, of which 94 acre-feet per year is committed to be served to the CalAm Monterey District service area (California American Water Company, 2012). The desalination plant draws brackish water from a perched aquifer portion of the Seaside Basin using subsurface extraction wells. The desalination plant operates brackish water intake wells adjacent to the coast in proximity to a portion of the Seaside Basin in which the Proposed Project would develop new injection well facilities several miles inland.

California Water Services Company

California Water Services Company serves the majority of the City of Salinas and the unincorporated communities of Bolsa Knolls, Las Lomas, Oak Hills, Country Meadows, Salinas Hills, and Buena Vista. All water delivered to the Salinas District customers is from aquifers of the Salinas Valley Groundwater Basin known as the Pressure Area and Eastside Area. Although the Proposed Project would not provide water directly to customers of the California Water Services Company, some component source waters originate in the same geographic location as the service area of this water company and the Proposed Project would provide additional water to the Castroville Seawater Intrusion Project area resulting in a net benefit to other groundwater users in Salinas Valley.

4.18.2.2 Wastewater and Recycled Water Service

The provision of sanitary sewer or wastewater service in the Monterey area is organized at two levels. Local cities and sanitation districts are responsible for maintenance and extension of sewer lines, and the Monterey Regional Water Pollution Control Agency (MRWPCA) is responsible for development and operation of treatment facilities, trunk main pipelines and pump stations. The MRWPCA provides wastewater treatment for municipalities along the Monterey Bay from Pacific Grove north to Moss Landing, and inland to the City of Salinas. MRWPCA owns and operates the Regional Treatment Plant (Regional Treatment Plant), where community wastewater is currently treated for use as recycled water or discharged to the ocean. MRWPCA also owns and operates the ocean outfall. Further description of the MRWPCA service area and facilities is provided below, followed by a discussion of municipal wastewater collection and industrial treatment systems.

Monterey Regional Water Pollution Control Agency (MRWPCA).

The MRWPCA, created in 1972, currently serves a population of approximately 250,000 and operates a regional wastewater system that consists of treatment, disposal and reclamation facilities. The MRWPCA regional wastewater system is shown in **Figure 2-2** in **Chapter 2, Project Description**. The system provides centralized wastewater treatment for cities and communities of northern Monterey County through a network of wastewater pump stations and pressure pipelines that convey wastewater to the Regional Treatment Plant for treatment, disposal and recycling.

MRWPCA provides services to: the cities of Monterey, Pacific Grove, Del Rey Oaks, Sand City, Marina, and Salinas; the Seaside Sanitation District; the Castroville, Moss Landing and Boronda Community Service Districts; and former Fort Ord lands. Residential, commercial, and industrial wastewater is conveyed to the Regional Treatment Plant, which is located north of the City of Marina. The Regional Treatment Plant primarily treats municipal

wastewater, but also accepts some dry weather urban runoff and other discrete wastewater flows.

Wastewater at the Regional Treatment Plant is treated to two different standards: 1) primary and secondary treatment in the Regional Treatment Plant for discharge through the MRWPCA ocean outfall or use as influent for the tertiary treatment system; and 2) Title 22 California Code of Regulations standards (tertiary filtration and disinfection) for unrestricted crop irrigation use. Recycled water is produced at the Salinas Valley Reclamation Plant (Salinas Valley Reclamation Plant), located at the Regional Treatment Plant, which produces tertiary-treated water for irrigation of farmland in the northern Salinas Valley as further described below. The Regional Treatment Plant and MRWPCA systems are described in detail in **Section 2.5.1 of Chapter 2, Project Description**, and are summarized below.

The Regional Treatment Plant has an average dry weather design capacity of 29.6 million gallons per day (mgd) and a peak wet weather design capacity of 75.6 mgd. It currently receives and treats approximately 16 to 17 mgd of wastewater, and therefore, has capacity to treat additional flows. The amount of wastewater that it receives and treats has been decreasing over time as shown in **Figure 4.18-2, Average Annual Wastewater Flow to Regional Treatment Plant**.

The volume of treated wastewater effluent at the Regional Treatment Plant 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 effluent from the MRWPCA Regional Wastewater Treatment Plant is diverted to the Salinas Valley Reclamation Plant for additional tertiary treatment and subsequent use for crop irrigation within the Castroville Seawater Intrusion Project area. The Castroville Seawater Intrusion Project area is shown in **Figure 4.10-9, Castroville Seawater Intrusion Project Area**, in **Section 4.10, Hydrology and Water Quality: Groundwater**.

In most winter months, secondary treated wastewater from the Regional Treatment Plant is discharged to Monterey Bay through the MRWPCA ocean outfall, which includes a diffuser that extends 11,260 feet offshore at a depth of approximately 100 feet. The diffuser on the ocean outfall is designed to convey wet weather flows of up to 81.2 mgd. However, the current permitted capacity of the outfall of 75.6 mgd is less than its 81.2 mgd capacity. As indicated above, some of the current secondary treated effluent (17-19 mgd) is discharged through the ocean outfall during winter months, while most is diverted to the Salinas Valley Reclamation Plant to produce recycled water for the Castroville Seawater Intrusion Project.

The interceptor pipeline system also has currently unused or excess conveyance capacity. **Figure 2.12 in Chapter 2, Project Description**, provides an overview graphic of the existing design capacities, average dry weather flows, and peak wet weather flows at each pump station in the MRWPCA wastewater collection system.

A 40-year wastewater flow projection analysis was conducted as part of the planning for the GWR project and wastewater operations. **Figure 4.18-3, Regional Treatment Plant Wastewater Flow Projections** shows the estimated range of future flows that may be anticipated in the future. The projections were based on review of historical population changes and historical wastewater flow data, which were used to calculate average flow generated per person in units of gallons per capita per day (gpcd) for the years 2000 through 2012. Trends in population and gpcd in each community were projected forward to the year 2055, and wastewater flow projections were calculated from these trends. Four “trends” were developed based on the following four population scenarios:

- Trend 1: A linear curve is fitted to data from year 2000 to 2012 with an 8% population increase.
- Trend 2: A linear curve is fitted to data from year 2006 to 2012 with a 30% population increase.
- Trend 3: An exponential curve is fitted to data from year 2000 to 2012 a 10% population increase.
- Trend 4: An exponential curve is fitted to data from year 2006 to 2012 with a 48% population increase.

It is projected that wastewater flows to the Regional Treatment Plant will continue to decrease until approximately the year 2030, when per capita flows are projected to reach a minimum and flows at the Regional Treatment Plant may range between 17.1 and 19.2 mgd. Based on the “high” and “low” projections of population growth and assuming a minimum of 59.0 gallons per capita per day, flows are projected to increase after 2030 and may range between 22.7 and 24.3 mgd by the year 2055, i.e. 77% to 82% of Regional Treatment Plant design capacity (Brezack & Associates, Inc., July 2014). The existing Regional Treatment Plant, therefore, has capacity to treat projected future flows with capacity remaining.

Salinas Valley Reclamation Plant / Castroville Seawater Intrusion Project

Wastewater from the Regional Treatment Plant is recycled at the co-located Salinas Valley Reclamation Plant tertiary treatment plant, which was constructed in 1998. The Salinas Valley Reclamation Plant produces water for irrigation of approximately 12,000 acres of farmland in the northern Salinas Valley via a project known as the Castroville Seawater Intrusion Project. MRWPCA operates the Castroville Seawater Intrusion Project by agreement with the Monterey County Water Resources Agency.

The Salinas Valley Reclamation Plant has a minimum capacity of about 8 mgd, and a maximum capacity of 29.6 mgd. The Salinas Valley Reclamation Plant includes an 80 acre-foot storage pond that holds tertiary-treated and Salinas River water (when available) before it is distributed to farmland via the Castroville Seawater Intrusion Project distribution system. The use of recycled wastewater for irrigation reduces regional dependence on and use of local groundwater, which, in turn reduces groundwater pumping-related seawater intrusion into the Salinas Valley aquifers.

The Castroville Seawater Intrusion Project began delivering water from the Salinas Valley Reclamation Plant (recycled water), as well as from supplemental groundwater wells, in 1998. Actual tertiary water that is delivered via the Castroville Seawater Intrusion Project for crop irrigation has averaged 12,936 AFY (2001 through 2013), but is trending upward. Currently, the agricultural community, Water Resources Agency and the MRWPCA are addressing water needs to supplement supply to the Castroville Seawater Intrusion Project service area, particularly in light of the drought characteristics of water years 2012 to 2015.

Municipal Wastewater Collection Systems

Marina Coast Water District maintains and operates the wastewater collection system in the former Fort Ord community that currently includes urban development in the unincorporated Monterey County and the cities of Marina and Seaside, including some areas under state and federal ownership, such as California State Parks, California State University Monterey Bay, the University of California, and the U.S. Army. Wastewater is carried by the Marina Coast Water District sanitary collection system to the MRWPCA pump stations. From local

pump stations, the wastewater is transported to the MRWPCA treatment plant north of Marina.

The Seaside County Sanitation District (SCSD) is a special district responsible for the maintenance and operation of the sanitary sewer collection system within portions of the cities of Seaside and Del Rey Oaks. The cities of Pacific Grove, Monterey, Marina and Salinas operate and maintain the sewer systems within their jurisdictions consisting of gravity sewers, pumping stations, and force mains to collect wastewater from residential and industrial customers. The collected residential wastewater is discharged to trunk sewers and interceptors owned and operated by the MRWPCA. The wastewater from these areas is ultimately conveyed to the MRWPCA Regional Treatment Plant for treatment.

Further details of municipal wastewater collection systems is provided in **Section 2.5.2, Municipal Wastewater Collection and Conveyance Systems**.

Salinas Industrial Wastewater Conveyance and Treatment System

The City of Salinas operates an industrial wastewater conveyance and treatment system that serves approximately 25 agricultural processing and related businesses located in the southeast corner of the City. This wastewater collection system is separate from the Salinas municipal sewage collection system and includes 14-inch to 33-inch diameter gravity pipelines that flow to the Salinas Pump Station Diversion site, and then flow into a 42-inch gravity pipeline to the Salinas Industrial Wastewater Treatment Facility (Salinas Treatment Facility), located on the Salinas River. Over 80% of the wastewater flows in this system are from fresh vegetable packing facilities (typically, wash water used on harvested row crops), and the remainder of flows originate from businesses associated with seafood processing, refrigerated warehousing, manufactured ice, preserves (frozen fruits, jams and jellies) and corrugated paper boxes. The Salinas Treatment Facility consists of an influent pump station, an aeration lagoon, percolation ponds, and rapid infiltration beds to treat, percolate and evaporate the industrial wastewater. The system is described in detail in **Section 2.5.3 of Chapter 2, Project Description**.

The Salinas Treatment Facility is designed and permitted for an average daily flow of 4.0 million gallons per day with a peak flow of 6.8 mgd. The Salinas Treatment Facility operates year-round, with a current peak monthly inflow during summer months of approximately 3.5 to 4.0 mgd. This summer peak corresponds with the peak agricultural harvesting season in the Salinas Valley. In recent years, substantial flows to the Salinas Treatment Facility have continued during the winter months due to the importation of agricultural products from out of state for processing. Currently, treated wastewater from the industrial wastewater treatment plant is not recycled.

4.18.3 Regulatory and Legal Framework

4.18.3.1 Federal

There are no federal laws or regulations related to water supply or wastewater issues addressed in this section. Laws and regulations governing water quality of treated wastewater discharged into the ocean are addressed in **Section 4.14, Marine Resources**. Laws and regulations related to drinking water quality and recharge/injection into groundwater basins with recycled water are described in **Section 3, Water Quality Permitting and Regulatory Overview** and **Section 4.10, Hydrology and Water Quality: Groundwater Resources**.

4.18.3.2 State

Department of Water Resources (DWR)

The California Department of Water Resources (DWR) manages the water resources of California in cooperation with other agencies, to benefit the people of the State, and to protect, restore, and enhance the natural and human environment. DWR conducts programs related to flood safety, water planning, environmental concerns such as climate change, and water supply. DWR coordinates closely with the State Water Resources Control Board. DWR has a role in defining groundwater basins in the State, and oversees the preparation of Groundwater Management Plans. The DWR is also responsible for building, operating, and maintaining the State Water Project, which supplies drinking water and agricultural irrigation water to various parts of the state, but not to Monterey County. Additionally, the DWR manages a number of grant programs, such as Integrated Regional Water Management (Proposition 50) grant programs and Local Groundwater Assistance (Proposition 84) grants.

State Water Resource Control Board

The passage of the Porter-Cologne Water Quality Control Act by the State of California in 1969 established the State Water Resources Control Board (State Board), which was created by merging the State Water Quality Control Board and the State Water Rights Board. The State Board is generally responsible for setting statewide water quality policy and is solely responsible for the allocation or determination of surface water rights, as discussed below. In addition to its statutory responsibilities, the State Board has an independent obligation to consider the effect of projects on public trust resources and to protect those resources where feasible (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419 [189 Cal.Rptr. 346]).

Removal of water from a surface water body for delivery to non-adjacent parcels constitutes appropriative use, which requires a permit from the State Board Division of Water Rights that establishes an appropriative right. An appropriative right may be established to use water for any reasonable, beneficial purpose on any land no matter where located, and to store water from one season for use in a later season, or from one year for use in subsequent years.

The State Board administers the state's statutory water right permit and license system, which applies to appropriations of water from surface streams and subterranean streams flowing through known and definite channels (Water Code, §1200). California has developed a dual system of water rights: appropriative and riparian rights as summarized on **Table 4.18-3, Water Rights Classifications Legal Classification and Implications of Rights to Surface Water (including Groundwater in a Subterranean Stream) and Percolating Groundwater**. An appropriative water right authorizes the diversion of a specified quantity of water at specific points of diversion, for a reasonable, beneficial use at specific places of use for specific purposes of use. To obtain a new appropriative water right, the appropriator must: (a) file a water right application with the State Board that details the proposed place of diversion and the intended use (Water Code, §1260), (b) obtain a permit pursuant to the application (which typically requires CEQA compliance before issuance); and (c) divert and beneficially use water pursuant to the permit. After all of these steps occur, the State Board may issue a water-right license, which then supersedes the permit and confirms the appropriative right (Water Code, §1610). In considering an application to appropriate water, the State Board considers a number of factors. Specifically, the State Board considers “the

relative benefit to be derived from (1) all beneficial uses of the water concerned including, but not limited to, use for domestic, irrigation, municipal, industrial, preservation and enhancement of fish and wildlife, recreational, mining and power purposes, and any uses specified to be protected in any relevant water quality control plan, and (2) the reuse or reclamation of the water sought to be appropriated, as proposed by the applicant. The board may subject such appropriations to such terms and conditions as in its judgment will best develop, conserve, and utilize in the public interest, the water sought to be appropriated.” The State Board is guided by the policy that domestic use is the highest use and irrigation is the next highest use of water. When the State Board decides whether or not to issue a water-right permit or approve a change petition, the State Board may include terms and conditions to protect existing water rights, the public interest, and the public trust, and to ensure that water is put to reasonable and beneficial use.

If a holder of an existing water-right permit or license wants to change the authorized points of diversion, or purpose of use, the holder must file a change petition with the State Board. The petition must describe the proposed new points of diversion, purpose of use, and purposes of use (Water Code, §1701.2.). If the State Board concludes that the requested changes will not initiate a new right or injure any other legal user of the water involved, then the State Board may approve the petition (Water Code, §§ 1702, 1704; Cal. Code Regs., tit. 23, §791(a)).

Table 4.18-3

Water Rights Classifications: Legal Classification and Implications of Rights to Surface Water (including Groundwater in a Subterranean Stream) and Percolating Groundwater

Type of Right	Surface Water Source (includes groundwater flowing in a known and defined channel [i.e., subterranean stream])	Percolating Groundwater Source
Riparian or Overlying	<i>Riparian Right to Divert Surface Water</i> <ul style="list-style-type: none"> Correlative with other riparian rights. Senior to appropriative rights. Not subject to State Board permitting jurisdiction 	<i>Overlying Right to Extract Percolating Groundwater</i> <ul style="list-style-type: none"> Correlative with other overlying right. Senior to appropriative rights. Not subject to State Board permitting jurisdiction.
Appropriative	<i>Appropriative Right to Divert Surface Water Junior to riparian rights.</i> <ul style="list-style-type: none"> Priority as to other appropriative rights based on first-in-time, first-in-right. Subject to State Board permitting jurisdiction if use was initiated after 1914. 	<i>Appropriative Right to Extract Percolating Groundwater</i> <ul style="list-style-type: none"> Junior to overlying rights. Priority as to other appropriative rights based on first-in-time, first-in-right. Not subject to State Board Permitting jurisdiction.

Source: Table 6-1 of California Groundwater Management (Bachman and others, 2005)

Groundwater Rights

In California, groundwater rights law is currently based upon a series of court decisions. There are three legally recognized classifications of groundwater in California: subterranean streams, underflow of surface waters, and percolating groundwater. Subterranean streams and underflow of surface waters are subject to the laws of surface waters and are regulated by the State Board through the permitting process described above. As indicated above, the State Board administers the state’s statutory water right permit and license system, which applies to appropriations of water from surface streams and subterranean streams of groundwater flowing through known and definite channels.

Percolating groundwater, on the other hand, has few regulation requirements. In most areas of California, overlying land owners may extract percolating groundwater and put it to beneficial use without approval from the State Board or a court. California does not have a

permit process for regulation of groundwater use. In some groundwater basins, however, groundwater use is subject to regulation in accordance with court decisions adjudicating the groundwater rights within the basins. The Seaside Basin is one of the adjudicated groundwater basins in the State. The Proposed Project would inject high quality recycled water into the Seaside Basin for later extraction by CalAm using their existing production wells for delivery to its customers

The California Supreme Court decided in the 1903 case *Katz v. Walkinshaw* that the “reasonable use” provision that governs other types of water rights also applies to groundwater. The Supreme Court case established the concept of overlying rights, in which the rights of others with land overlying the aquifer must be taken into account. Later court decisions established that surplus groundwater may be appropriated for use outside the basin, although appropriator’s rights are subordinate to those with overlying rights.

On September 16, 2014, Governor Edmund G. Brown Jr. signed three bills -- AB 1739 by Assembly member Roger Dickinson and SB 1168 and SB 1319 by Senator Fran Pavley -- which create a framework for sustainable, local groundwater management for the first time in California history. The legislation allows local agencies to tailor groundwater sustainability plans to their regional economic and environmental needs. The legislation has the following two principles: (1) Groundwater is best managed at the local or regional level, and local agencies should have the tools they need to sustainably manage their resources, including the necessary authority, better technical information and financial resources; and (2) The state may intervene temporarily when local or regional agencies cannot or will not manage their groundwater sustainably to ensure the protection of the groundwater basin and its users from overdraft, subsidence, and other problem. (Groundwater Legislation Implementation Fact Sheet, accessed January 2015 at grac.org/documents/2014/Groundwater-Fact-Sheet.pdf).

State Regulations Related to Rights to Wastewater

According to the California Water Code §§1210 through 1212, the owner of a wastewater treatment plant, such as MRWPCA, has the exclusive right to the treated wastewater it produces over anyone who has supplied the water discharged into the wastewater collection and treatment system, including a person using water under a water service contract. This rule can be varied by contractual arrangement. The relevant local agencies including MRWPCA have entered into agreements that constitute contractual agreements related to wastewater and these are described in **Section 4.18.3.4 Legal Agreements**. The water code (section 1211) requires that prior to making any change in the point of discharge, place of use, or purpose of treated wastewater, approval must be obtained from the State Board. New State Board guidance has clarified that a wastewater petition for change only needs to be filed with the State Board Division of Water Rights if the owner of the wastewater treatment plant decreases the amount of water in a stream or other waterway. The Proposed Project changes to the Regional Treatment Plant that would result in reduce disposal of secondary effluent to the outfall would not change the amount of water in a stream or other waterway. The diversion of agricultural wash water, an industrial wastewater, to the Regional Treatment Plant using the Salinas Pump Station Diversion and the Salinas Treatment Facility Storage and Recovery components of the project and its effects on water levels or flows in the Salinas River are addressed in **Section 4.11, Hydrology and Water Quality: Surface Waters**.

4.18.3.3 Local Policies and Regulations

In addition to the general requirements of CEQA and California laws and regulations described above, adequate provision of water supply and wastewater systems are addressed in General Plans and municipal codes of local jurisdictions within the Proposed Project area. **Table 4.18-4, Applicable Local Plans and Policies – Water Supply and Wastewater Systems** summarizes state, regional, and/or local policies and regulations pertaining to water supply and wastewater systems that are relevant to the Proposed Project and that were adopted for the purpose of avoiding or mitigating an environmental effect. **Table 4.18-4** provides a review project consistency and/or conflicts with such plans, policies, and regulations. As shown in the table, the Proposed Project would not conflict with any plans, policies, and regulations related to water supply and wastewater systems. The Proposed Project would improve the ability of the local agencies to comply with the relevant policies.

Table 4.18-4
Applicable Local Plans and Policies – Water Supply and Wastewater

Project Planning Region	Applicable Plan	Resource Topic	Project Component(s)	Specific Policy, or Program	Project Consistency with Policies, and Programs
City of Marina	City of Marina General Plan	Community Infrastructure	RUWAP Alignment Option Coastal Alignment Option RUWAP Booster Pump Station Option	<p>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 effect 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:</p> <p>11. Minimize the consumption of water for urban purposes and make maximum possible use of recycled water.</p> <p>14. Support water resource programs, including desalinization and reclamation efforts, to provide an adequate water supply to accommodate General Plan permitted growth.</p>	<p>Consistent: The purpose of the Proposed Project is to provide a replacement water supply source for existing water sources along the Carmel River and the Salinas Valley Groundwater Basin and is consistent with city's support of water resource programs, including reclamation efforts.</p>
City of Seaside	City of Seaside General Plan	Land Use	RUWAP Alignment Option Coastal Alignment Option Coastal Booster Pump Station Option Injection Well Facilities Transfer Pipeline Monterey Pipeline	<p>Goal LU-5: Collaborate with local and regional water suppliers to continue to provide quality water supply and treatment capacity to meet community needs.</p>	<p>Consistent: The Proposed Project will provide additional alternative water supply through advanced treatment of recycled water and groundwater injection, and provision of additional recycled water for irrigation.</p>
County of Monterey	Monterey County General Plan	Public Services	Salinas Treatment Facility Storage and Recovery Reclamation Ditch, Tembladero Slough, and Blanco Drain Diversions Treatment Facilities at Regional Treatment Plant RUWAP Alignment Option Coastal Alignment Option	<p>PS-3.12 The County shall maximize the use of recycled water as a potable water offset to manage water demands and meet regulatory requirements for wastewater discharge, by employing strategies including, but not limited to, the following:</p> <p>a. Increase the use of treated water where the quality of recycled water is maintained, meets all applicable regulatory standards, is appropriate for the intended use, and re-use will not significantly impact beneficial uses of other water resources.</p> <p>b. Work with the agricultural community to develop new uses for tertiary recycled water and increase the use of tertiary recycled water for irrigation of lands currently being irrigated by groundwater pumping.</p> <p>c. Work with urban water providers to emphasize use of tertiary recycled water for irrigation of parks, playfields, schools, golf courses, and other landscape areas to reduce potable water demand.</p>	<p>Consistent: The Proposed Project will provide additional alternative water supply through advanced treatment of recycled water and groundwater injection, and provision of additional recycled water for irrigation.</p>

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4.18.3.4 Memorandum of Understanding and Legal Agreements

The following addresses the source water agreements and existing legal agreements for source water, surface water, and wastewater/recycled water between the various agencies. The various agreements are summarized in **Table 4.18-5**.

Table 4.18-5

Summary of Relevant Local Agency Agreements

Name	Agencies	Date
Memorandum of Understanding Regarding Source Waters and Water Recycling	Monterey Peninsula Water Management District, Marina Coast Water District, Monterey County Water Resources Agency, Monterey Regional Water Pollution Control Agency, City of Salinas	October 2014 (Amended April 2015 to provide time extension past March 31, 2015)
Annexation Agreement for MCWD into MRWPCA	MCWD	April 1989
Annexation Agreement for MCWD into MCWRA Zones 2 and 2A	Monterey County Water Resources Agency, et al.,	March 1996
Agreement between Monterey County Water Resources Agency and Monterey Regional Water Pollution Control Agency for the Construction and Operation of a Tertiary Treatment System and Amendments	Monterey County Water Resources Agency and Monterey Regional Water Pollution Control Agency	June 1992 May 1995 (1 st) Feb 1998 (2 nd) May 2002 (3 rd)

Memorandum of Understanding Regarding Source Waters and Water Recycling

Previous interagency agreements have established entitlements to recycled water produced from the existing municipal wastewater flows to the Regional Treatment Plant. As source flows for the Proposed Project were studied and the seasonal variability of each was understood, the stakeholder agencies entered into a Memorandum of Understanding Regarding Source Waters and Water Recycling (MOU) (October 2014). The parties to the MOU are the Monterey Regional Water Pollution Control Agency, the Monterey County Water Resources Agency, the City of Salinas, the Marina Coast Water District, and the Monterey Peninsula Water Management District (the “Parties”). The MOU is an agreement to “negotiate a Definitive Agreement to establish contractual rights and obligations of all Parties,” that would include (1) protection of Marina Coast Water District’s recycled water right entitlement, (2) provision of up to 5,292 AFY of additional recycled water to Monterey County Water Resources Agency for the Castroville Seawater Intrusion Project, and (3) provision of 3,500 AFY of purified recycled water for injection into the Seaside Basin and extraction by CalAm. The MOU also includes provisions for creation of a drought reserve by allowing the GWR Features¹ to produce, convey and inject up to 200 AFY of additional purified recycled water during wet and normal years. The MOU reflects the stakeholder agencies’ positions regarding the combined benefits and conditions that would be required to secure the necessary rights and agreements to use the source waters needed for the Proposed Project.

¹ Proposed Project improvements and operations that will develop high quality replacement water for existing urban supplies in the CalAm Monterey District are referred to as the GWR Features. The provision of up to 5,292 AFY of additional recycled water for irrigation of farmland within the Castroville Seawater Intrusion Project areas are referred to as the Crop Irrigation component.

The MOU establishes the proposed source water amounts as:

- (1) 4,320 acre-feet for GWR Features that provide for treatment and injection of Proposed Project product water into the Seaside Basin,
- (2) 5,292 acre-feet for additional crop irrigation water for the Castroville Seawater Intrusion Project, and
- (3) an additional 248 acre-feet for GWR Features to produce additional product water for injection in most years to be held in drought reserve.

These are approximate amounts based on average year conditions, but actual amounts may vary based on climate, demands for recycled water, and actual operational considerations. The MOU reflects the parties' intention that, under a Definitive Agreement, the MRWPCA would have rights to the first 4,320 acre-feet annually of the new "incremental" source waters, plus amounts in the six winter months to produce 200 acre-feet to be placed in drought reserve. The MOU also indicates that Salinas agricultural wash water may be utilized by MRWPCA for the time period necessary for an average annual amount of 4,320 acre-feet for the Proposed Project to be achieved, but that the MRWPCA would endeavor to develop the additional supplies and transition a portion of the agricultural wash water for the benefit of Water Resources Agency and to meet the CSIP area irrigation demands.

In April 2014, the Water Resources Agency filed an application with the State Board for water rights to appropriate waters of the Blanco Drain, the Reclamation Ditch and Tembladero Slough for the purpose of providing additional waters for Castroville Seawater Intrusion Project and for domestic supplies within the Salinas Valley, Zone 2C (Water Right Application 32263). The MOU indicates that such water rights would be retained exclusively by the Water Resources Agency, but that all Parties would work jointly on obtaining the water rights needed for the Proposed Project through amendments to the permit application. The Agreement also addresses a possible future development of source waters by 2022 for the benefit of Salinas Valley Zone 2C, which is not part of the Proposed Project and, if pursued, would be addressed in a future environmental document. The additional source waters are not needed for the Proposed Project.

On November 10, 2014, the State Water Resources Control Board sent a letter stating that the Division staff found that the water rights application was incomplete for several reasons, including the following: "the nature and amount of the proposed use is not clearly stated," "no information is provided regarding the potential effect of the project on fish and wildlife or measures proposed to be taken for the protection of fish and wildlife," "no information is provided to demonstrate a reasonable likelihood that unappropriated water is available for appropriation," and "proper maps were not included." The Monterey County Water Resources Agency submitted a response to the application deficiencies that are needed to perfect the application (April 2015). This Draft EIR provides information regarding fish and wildlife associated with a portion of the proposed diversions in Application 32263 within **Sections 4.4, Biological Resources: Fisheries, and 4.5 Biological Resources: Terrestrial.**

Previous Agreements to Recycle/Use Municipal Wastewater Flows

The MRWPCA has entered into a number of contracts related to its exclusive rights to use wastewater discharged to its system for treatment described above under (State Regulations related to Rights to Wastewater). The Proposed Project intends to utilize excess wastewater not used by the farmers within the Castroville Seawater Intrusion Project area of the Salinas Valley for crop irrigation.

Marina Coast Water District possesses legal rights to use wastewater treated by the Salinas Valley Reclamation Plant at the Regional Treatment for urban irrigation within areas that they serve. In 1989, when Marina Coast Water District was annexed into the MRWPCA, they acquired contractual rights to wastewater they would discharge to the system which are described below. In 1996, when Marina Coast was annexed into MCWRA's Zones 2 and 2A, their rights were clarified. The agreements that established these rights are described in detail below. Currently, Marina Coast does not have approved funding, water purchase/user agreements, or adequate physical distribution facilities to use the recycled water. Marina Coast's proposed use of recycled water (as part of their approved Regional Urban Water Augmentation Program, or RUWAP Recycled Water Project) is considered a cumulative project in this EIR. This EIR evaluates the Proposed Project's contribution to the environmental impacts due to implementation of all other past, present, and reasonably foreseeable future projects, including the RUWAP Recycled Water Project in **Section 4.18.4.5, Cumulative Impacts and Mitigation Measures**.

This section also summarizes the existing legal agreements regarding the use of wastewater flows for recycling and use for crop irrigation in the Castroville Seawater Intrusion Project area. In 1992, the MRWPCA and the MCRWA formed a partnership to build the two Monterey County Reclamation Projects: the Salinas Valley Reclamation Plant recycled water plant and the Castroville Seawater Intrusion Project distribution system. As long-time project partners, MRWPCA is contracted with the Monterey County Water Resources Agency (Water Resources Agency) to operate and maintain the Castroville Seawater Intrusion Project. The MRWPCA entered into an agreement with the Water Resources Agency in 1992 for construction and operation of a tertiary treatment system (the "1992 Agreement") with subsequent amendments which granted contractual rights to both the Water Resources Agency and MRWPCA. The Castroville Seawater Intrusion Project began delivering water from supplemental groundwater wells, in 1997 and from the Salinas Valley Reclamation Plant (recycled water) in 1998. The delivered water serves agricultural growers in the Castroville area.

The primary rights of the entities with contractual rights to treated wastewater produced by MRWPCA are described below.

Marina Coast Water District's Legal Agreements

In 1989, Marina Coast Water District (Marina Coast) was annexed into the MRWPCA. That annexation agreement provides Marina Coast with the right to:

"... obtain from the MRWPCA, at the regional treatment plant, treated wastewater for reuse by the Marina Coast in quantities equal to the volume of Marina Coast wastewater treated by MRWPCA and such additional quantities as from time to time are not committed to any other users for beneficial use. Marina Coast's cost for such treated wastewater will be the MRWPCA's incremental cost over secondary treatment, to meet applicable local, state and federal requirements for water reuse, not to exceed the lowest amount charged to any other user by the MRWPCA for treated water. Water reclaimed by the Marina Coast will not be used in violation of any condition placed on the MRWPCA in connection with its Use Permit No. 3188, dated August 12, 1987, issued by the County of Monterey for the Regional Treatment Plant." (Marina Coast 1989 Annexation Agreement, page 5)

In 1996, Marina Coast was annexed into the MCWRA's Zones 2 and 2A pursuant to the 1996 Annexation Agreement (Monterey County Water Resources Agency, et al., March 1996). In that agreement, Marina Coast received the right to receive tertiary-treated water from the Salinas Valley Reclamation Plant, in satisfaction of Marina Coast's 1989 Annexation Agreement rights.

“In satisfaction of paragraph 12 of the MRWPCA Annexation Agreement, Marina Coast will pay to MCWRA the incremental cost over secondary treatment to receive tertiary treated water from MRWPCA’s planned tertiary treatment facilities at its regional treatment plant. . . .” (Section 5.6)

Section 5.7 of the 1996 Agreement also establishes a 300 AFY cap for Marina Coast from April through September, allowing amounts deferred to be taken during the winter months of October through March:

“ . . . during the months of April through September, Marina Coast agrees to defer taking any water over 300 AFY it is entitled to take from the tertiary treatment plant under the MRWPCA Annexation Agreement. . . .” (Section 5.7.2)

At the time of both of the 1989 and 1996 Annexation Agreements, Marina Coast’s legal service area and boundaries were the same as they are today (see **Figure 4.18-1**).

Marina Coast Water District’s Regional Urban Water Augmentation Project is intended to provide recycled and desalinated water service to areas on the former Fort Ord, and an additional 300 AFY of desalinated water to Marina Coast’s other service areas. It also anticipates the possibility of MRWPCA separately providing 300 AFY of water to the Monterey Peninsula for urban irrigation. In June 2009, MRWPCA and Marina Coast entered into a Memorandum of Understanding (MOU) with respect to the RUWAP. Section 1.2 of the RUWAP MOU states the following:

“Under the selected Hybrid Water Alternative, MCWD would provide 2,400 AFY for redevelopment of the former Fort Ord, 300 AFY of recycled water could be provided for the Monterey Peninsula, and an additional 300 AFY of desalinated water could be provided to supply MCWD’s other service areas. As a result of Addendum 2 to the RUWAP EIR, up to 1,727 AFY of recycled water would be used for the project. The RUWAP EIR, in Section 3.2, anticipates that subsequent project-level environmental review will be necessary prior to implementing the component to provide 300 AFY to the Monterey Peninsula.”

MRWPCA has previously committed 650 AFY of its summer water to the RUWAP during May through August; MCWD committed its 300 AFY of summer water during April through September.² Both parties committed additional quantities as needed during the months of September through April from MRWPCA, and October through March from MCWD allocations.

MCWD has not yet proceeded to construct and operate the RUWAP Recycled Water Project, except for several disconnected segments of distribution system pipeline that would not by themselves be able to provide recycled water to users (Brian True, personal communication, August 2014). The MCWD has not committed funding nor received financing toward construction of the facilities needed to deliver recycled water to irrigation demands. No signed user agreements have been entered.

Monterey County Water Resources Agency’s Rights

In June 1992, Monterey County Water Resources Agency and Monterey Regional Water Pollution Control Agency signed an agreement called the “Agreement between Monterey County Water Resources Agency and Monterey Regional Water Pollution Control Agency for

² These “summer” seasons for Marina Coast and for MRWPCA, when the amounts of water available to those agencies is capped, differ in accordance with provisions of the 1996 Agreement and the Third Amendment to the 1992 Agreement for MRWPCA. The “shoulder” months are April and September, when MCWD is subject to a summer cap and MRWPCA is not.

the Construction and Operation of a Tertiary Treatment System” (1992 Agreement). The Agreement provided for the construction and operation of the Salinas Valley Reclamation Plant by the MRWPCA to provide water treated to a level adequate for agricultural irrigation, for use by the CSIP. Financing for the Salinas Valley Reclamation Plant was obtained using resources of both the MCWRA and the MRWPCA.

MRWPCA provides the wastewater influent that is treated at the Salinas Valley Reclamation Plant, and then delivered to the CSIP. The CSIP is a distribution system providing water for agricultural irrigation. The 1992 Agreement has been amended three times. The amendment that generated the MRWPCA rights to water is Amendment No. 3, also known as the Third Amendment.

Section 3.03 of the 1992 Agreement, as amended pursuant to Amendment No. 3, provides that MRWPCA commits all of its incoming wastewater flows to the project from sources within the 2001 MRWPCA service area to the CSIP, up to 29.6 million gallons per day (mgd), except for:

- (a) flows taken by Marina Coast per the Annexation Agreements;
- (b) losses;
- (c) flows not needed to meet MCWRA's authorized demand; and
- (d) flows to which MRWPCA is entitled per Articles IV and XVII of Amendment No. 3.

There have not been any MRWPCA service area expansions beyond the 2001 boundaries. MCWRA's basic demand in the “Initial Term” of the 1992 Agreement, as amended, is capped at 19,500 acre feet (AF). (Article IV, Section 4.02, Amendment No. 3.) Also in the Initial Term, MCWRA's supplemental demand applies to excess water, which supplemental demand is subject to Marina Coast and MRWPCA rights and to allocations made to other future intertie projects by MRWPCA or others pursuant to Section 1.05. (Sections 4.07 and 4.08, Amendment No. 3.) MCWRA's demand in any “Extended Term” is capped at the amounts of water delivered to MRWPCA that originated in the Salinas Valley (Section 4.03, Amendment No. 3)³, and the right to use unused water on an “as available” basis (Section 17.04, Amendment No. 3.) The Initial Term commenced on the effective date of the agreement in 1992. MRWPCA's rights were established pursuant to the Third Amendment to that agreement, in 2002. The Extended Term starts the later of 2035 or the year following both United States Bureau of Reclamation loans being paid off (Section 11.02, Amendment No. 2), which is scheduled to occur by the end of 2037. Hence, the relevant starting date of the Extended Term should be January 1, 2038.

Unless otherwise provided by agreement, the owner of a wastewater treatment plant has the exclusive right to the treated wastewater it produces as against anyone who has supplied the water discharged into the wastewater collection and treatment system, including a person using water under a service contract.⁴ MRWPCA therefore has the exclusive right to use municipal wastewater that is discharged into its collection system, except as that right has been varied by contractual arrangements.

Here, MRWPCA has entered into the following contracts, including contracts that assigned rights to Marina Coast Water District and Monterey County Water Resources Agency (Water Resources Agency):

³ Marina Coast provides water to its existing service area with water originating in the Salinas Valley. Marina Coast uses the same water source for its contractual service area of the former Fort Ord. During the Extended Term, the amount of water Marina Coast takes will not affect the water available to MRWPCA.

⁴ Cal. Water Code § 1210.

- The 1989 Annexation Agreement between MRWPCA and the Marina Coast Water District provides the Marina Coast Water District with the right to obtain treated wastewater from MRWPCA. The Marina Coast Water District has not exercised its recycled water rights, but may do so in the future.
- The 1992 agreement between MRWPCA and Water Resources Agency (including amendments) provides for the construction and operation of the Salinas Valley Reclamation Plant by MRWPCA to provide water treated to a level adequate for agricultural irrigation for use by the Castroville Seawater Intrusion Project. In particular, Section 3.03 of the 1992 Agreement (Amendment 3) provides that MRWPCA commits all of its incoming wastewater flows to the treatment plant from sources within the 2001 MRWPCA service area, up to 29.6 million gallons per day, except for flows taken by the Marina Coast Water District under the Annexation Agreements, losses, flows not needed to meet the Water Resource Agency's authorized demand, and flows to which MRWPCA is otherwise entitled under the agreement.
- In 1996, pursuant to another Annexation Agreement, the Marina Coast Water District received the right to tertiary-treated water from the Salinas Valley Reclamation Plant, in satisfaction of the 1989 agreement rights.

To address these and other water rights, the stakeholder agencies entered into a Memorandum of Understanding (MOU). The MOU reaffirmed the Marina Coast Water District's and Water Resources Agency's recycled water entitlements, and presented a proposal for collection of additional source waters to meet the Proposed Project objectives.

Importantly, the MOU is intended to provide a framework for negotiation of a Definitive Agreement and does not create a binding contractual obligation. The Definitive Agreement would establish the contractual rights and obligations of the parties. To date, the Definitive Agreement has not yet been completed. If a Definitive Agreement is reached, it would be approved after the EIR is certified (Perkins Coie, 2015).

Legal Agreements/Permits for Diversions from Salinas and Monterey Stormwater Collection Systems to MRWPCA Collection and Treatment Systems

To divert stormwater and dry weather flow from urban areas, agreements are needed between MRWPCA and the local agencies that currently collect and convey the flows in man-made facilities for discharge to surface waters. These local agencies include the City of Salinas for urban runoff/stormwater source water from the Salinas River and the City of Monterey for the Lake El Estero source water that otherwise would be discharged into the Monterey Bay. Stormwater runoff from urban areas through storm drain infrastructure (i.e., in the City of Salinas or Monterey) does not become water of the state until it is discharged into a river or channel. (Perkins Coie, 2015)

4.18.4 Impacts and Mitigation Measures

4.18.4.1 Significance Criteria

Based on Appendix G of the CEQA Guidelines, the project would result in significant impacts related to water supply and wastewater services and facilities if it would:

- a. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;

- b. Have insufficient water supply available to serve the project from existing entitlements and resources, or require new or expanded water supply resources or entitlements; or
- c. Result in a determination by the wastewater treatment provider that would serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

No additional significance criteria are needed to comply with the CEQA-Plus⁵ considerations required by the State Revolving Fund Loan Program administered by the State Water Resources Control Board.

Based on Appendix G of the CEQA Guidelines, the project also would result in a significant impact if it were to exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. The only Proposed Project component that would result in treatment of wastewater would be the new the Treatment Facilities at the Regional Treatment Plant, including the new Advanced Water Treatment Facility, and Salinas Valley Reclamation Plant Modifications. The Product Water produced at the Regional Treatment Plant will be subject to treatment standards established by state regulations; described in detail in **Section 3**, Water Quality Regulatory and Permitting Compliance.

The Regional Treatment Plant's secondary effluent would continue to be subject to NPDES permit requirements which will be amended to allow this project to be operated as proposed. As discussed in **Section 2.8.3, Operations and Maintenance**, in **Chapter 2, Project Description** reverse osmosis by-product wastewater (RO concentrate) from the Advanced Water Treatment Facility would be discharged through the MRWPCA's existing ocean outfall and diffuser. The RO concentrate stream could be blended with treated wastewater effluent from the Regional Treatment Plant when available prior to discharge. The Proposed Project operations on wastewater discharges via the existing ocean outfall due to discharge of the reverse osmosis concentrate are addressed in **Section 4.13, Marine Resources**.

4.18.4.2 Impact Analysis Overview

Approach to Analysis

Construction

The approach to evaluation of construction-related activities on water supply and wastewater facilities is to review whether or not temporary water demand and/or wastewater generation associated with construction activities would result in the need for new or expanded water or wastewater treatment facilities, and, thus, result in potentially significant impacts. The maximum number of construction workers would range between seven and 30 at any one construction site, with the maximum of 30 workers at the Regional Treatment Plant. The average number of daily workers is three to 25 at the other construction sites, with 25 workers on average per day estimated for construction of the CalAm Distribution Pipelines. **Table 4.18-5, Summary of Relevant Local Agency Agreements**, Construction Traffic Assumptions for all Proposed Project Components in **Section 4.18**, provides the estimate of average and maximum daily construction workers at each site. Typical water use and wastewater generation for workers at construction sites is low <1 gallon per worker per day for a total of up to 55 gallons per day.

⁵ To comply with applicable federal statutes and authorities, EPA established specific "CEQA-Plus" requirements in the Operating Agreement with State Board for administering the State Revolving Fund (SRF) Loan Program.

Operation

Long-term impacts on water supply and wastewater facilities may occur as a result of water demand and/or wastewater generation associated with periodic facility operations and maintenance activities and new employees. This section also evaluates whether identified source water supplies and wastewater treatment capacity are sufficient to accommodate the Proposed Project operations or whether new or expanded water supply sources or entitlements are required to serve the project and whether adequate wastewater treatment capacity exists. The Proposed Project operations will result in nine new permanent employees as summarized on **Table 2-9** in **Section 2.0**.

The primary project components addressed in this section are the incremental source water diversions to be supplied to the Regional Treatment Plant. The Proposed Project would divert a number of new incremental source waters to existing municipal wastewater collection and treatment facilities to increase availability of (or augment) secondary-treated wastewater for recycling and reuse. Therefore, the approach focuses on the criteria related to whether there is sufficient water supply (i.e., in this case, flowrates, annual yields, and infrastructure capacities for diverting incremental source waters for treatment and recycling to meet project objectives) from existing entitlements and resources, or if the Proposed Project would require new or expanded water supply resources or entitlements.

This section relies on technical investigations conducted during the preliminary design stage to estimate source water availability, infrastructure capacity, and the long-term ability for the project to utilize incremental source waters to augment existing secondary-treated wastewater flows available to the Proposed Project. Operational impacts are analyzed based on the results of these technical reports, which are summarized in **Section 4.18.1, Introduction**. In addition, **Section 2.7** provides details of the volume of source waters available and proposed for use.

Areas of No Impact

Some of the significance criteria listed above are not applicable to the Proposed Project or the Proposed Project would not result in impacts related to the criteria as discussed below.

- (a) *Require or result in the construction of new water or wastewater treatment facilities or the expansion of existing facilities.* As described in **Section 2.4, Project Objectives**, the purpose of GWR is to replenish the Seaside Basin to produce 3,500 acre-feet per year (AFY) of high quality water that would replace a portion of CalAm's water supply as required by state orders. The Proposed Project includes increased use of existing wastewater treatment facilities that currently operates at about 40% less than its design capacity (approximately 17 to 18 mgd in recent years compared to the design capacity of 29.6 mgd). The Proposed Project also includes construction of new water facilities, which is the subject of analyses in this EIR. The EIR analysis addresses impacts of construction and operation of the Proposed Project in each topical section in Chapter 4, Environmental Setting, Impacts, and Mitigation Measures, and discusses the potential impacts and identified mitigation measures associated with the proposed construction/expansion of these facilities. The Proposed Project would not result in any other impacts that are not addressed within this section elsewhere because all required construction of new, and expansion of existing, water supply or wastewater treatment facilities, are described and analyzed in this EIR.

Summary of Impacts

Table 4.18-6 provides a summary of potential impacts related to water supply and wastewater systems and significance determinations at each Proposed Project component site.

Table 4.18-6

Summary of Impacts – Water Supply and Wastewater Systems

Impact Title	Source Water Diversion and Storage Sites						Treatment Facilities at Regional Treatment Plant	Product Water Conveyance		Injection Well Facilities	CalAm Distribution System		Project Overall
	Salinas Pump Station	Salinas Treatment Facility Storage and Recovery	Reclamation Ditch	Tembladero Slough	Blanco Drain (Pump Station and Pipeline)	Lake El Estero		RUWAP Alignment Option	Coastal Alignment Option		Transfer Pipeline	Monterey Pipeline	
WW-1: Impact of Construction on Water Supplies or Entitlements	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS
WW-2: Impact of Construction on Wastewater Treatment Capacity	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS
WW -3: Impact of Operations on Water Supplies or Entitlements	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS
WW -4 Impact of Operations on Wastewater Treatment Capacity	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	NI	NI	LS
Cumulative Impacts	LS: The Proposed Project would not make a considerable contribution to significant cumulative impacts to water supply. There would be no significant construction or operational cumulative impacts to wastewater treatment capacity or ocean outfall capacity.												
NI – No Impact LS – Less than Significant LSM – Less than Significant with Mitigation SU – Significant Unavoidable BI – Beneficial Impact													

4.18.4.3 Construction Impacts and Mitigation Measures

Impact WW-1: Construction-Related Water Demand. The Proposed Project would result in a temporary increase in water use due to construction-related demands, but existing water supplies would be sufficient to serve construction-related demands and construction activities would not require new or expanded water supply resources or entitlements. (Criterion b) (Less than Significant)

Construction at all Proposed Project sites would result in a limited, temporary demand for water for construction-related purposes, typically associated with watering surfaces for compaction and dust control. Construction water is typically acquired by the construction contractor. Contractors prefer local sources of water to fill their water trucks; therefore, the Proposed Project is expected to use water from one of three sources for dust control (as required in Mitigation Measure AQ-1):

- Salinas Valley Reclamation Plant when it is in excess of the amount of water needed to irrigate cropland in the Castroville Seawater Intrusion Project area,
- Groundwater from the A-aquifer beneath the Regional Treatment Plant site that is also currently used for dust control at the adjacent landfill, and

For the Injection Well Facilities construction, Seaside Basin water from nearby existing water supply wells may be used, but that water would be allowed to percolate back to the same aquifer system. Portable toilets would be installed at construction sites for construction workers, which would not require water from potable supplies.

The amount of construction water used at any individual construction site would be negligible (estimated to be a onetime use of approximately 70 acre-feet total, or about 1.1 acre-foot per acre of ground disturbance) in comparison to total water demands within the Proposed Project area of tens of thousands of acre-feet every year, and no new or expanded water supplies, entitlements or facilities would be needed to meet construction-related water demands. Thus, the impact of temporary construction-related water demand on local water supplies would be less than significant, and no mitigation measures are required.

Impact WW-2: Construction-Related Wastewater Generation. The Proposed Project would result in a temporary increase in wastewater generation due to demand from construction workers, but existing wastewater treatment facilities have sufficient capacity to serve construction-related demands. (Criterion c) (Less than significant)

Construction at all Proposed Project sites would result in minimal wastewater generation from construction workers. Portable toilets would be provided at each site for construction workers, and the wastewater would be disposed at the Regional Treatment Plant, which serves all of the areas in which the Proposed Project components are located. Up to a maximum of approximately 250 daily construction workers could be employed at all construction sites. Assuming a conservative wastewater generation rate of 1 gallon per day per worker, a maximum of 250 gallons per day in wastewater may be generated during construction. The Regional Treatment Plant has an excess average dry weather treatment capacity of 12 to 13 mgd. Thus, the existing Regional Treatment Plant has more than sufficient capacity to serve temporary construction-related increases in wastewater requiring treatment. No new or expanded water facilities would be needed to meet construction-related wastewater generation, and temporary construction-related impacts of wastewater generation water would be less than significant. No mitigation measures are required.

4.18.4.4 Operational Impacts and Mitigation Measures

Impact WW-3: Operational Water Supply and Entitlements. Sufficient water supplies are available for operation of the Proposed Project; prior to construction of each source water diversion component and prior to diversion of secondary treated effluent, the project proponent would obtain applicable water rights, permits, or agreements. (Criterion b) (Less than Significant)

Potable Water to Serve Project Facilities and Employees

Project implementation would generate nine new permanent jobs within the region, some within CalAm's Monterey District water 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 from the addition of the

nine new permanent employees during operation of the project, nor from initial irrigation demand of drought-tolerant landscaping proposed for screening at some component sites. Existing water supplies would be sufficient to serve operational demands, and thus the impact related to new potable water demand from Proposed Project operations is considered less than significant.

Source Water to Serve Project Operations/Objectives

The preliminary determination of feasibility of the Proposed Project required technical investigations to estimate the availability of source waters to be treated at the Regional Treatment Plant and to assess the ability of the Proposed Project to obtain supplemental source waters to augment existing secondary-treated wastewater flows available to the Project. Source water supplies, including wastewater availability, and the need to secure rights and agreements for proposed new source waters to accomplish the Proposed Project objectives are addressed in this section. Necessary infrastructure improvements to existing water conveyance and wastewater systems are included in the description of the Proposed Project (see **Section 2**). Impacts of these water supply and wastewater facilities improvements are evaluated in **sections 4.2** through **4.18** of the EIR. The following summarizes the analysis and information related to the quantities of source waters potentially available to be recycled by the Proposed Project, and the water rights and agreements proposed to be acquired by the project partners in order to implement the Proposed Project.

Availability and Use of Source Water

Implementation of the Proposed Project would require several source waters that, together, would provide a portfolio that could provide the following amounts of water for recycling and reuse: 4,320 acre-feet per year (AFY) of source water to produce 3,500 AFY of finished product water to inject into the Seaside Basin (the GWR Features); approximately 4,500 to 4,750 AFY⁶ of source water for recycling and use on the Castroville Seawater Intrusion Project area (the Crop Irrigation Features); and an additional 248 AFY of source water in wet or normal years to produce 200 AFY more advanced treated recycled water for injection into the Seaside Groundwater Basin to build a “drought reserve.”⁷ Taken together, the Proposed Project would recycle and reuse up to a total of 9,858 AFY of source waters to provide the proposed amounts of finished water. New source waters would supplement the existing incoming wastewater flows, and would include the following: 1) water from the City of Salinas agricultural wash water system, 2) stormwater flows from the southern part of Salinas and the Lake El Estero facility in Monterey, and 3) surface water and agricultural tile drain water that flows in the Reclamation Ditch, Tembladero Slough, and Blanco Drain.

As discussed in **Section 2.7**, the proposed portfolio of source waters would provide adequate source water quantities to accomplish the project objectives. **Table 2-11** in **Section 2.0** summarizes the results of the Water Management District and MRWPCA’s analysis of the data and assumptions used to estimate source water availability and use. As shown on **Table 2-11**,

⁶ In a drought year, the Proposed Project would potentially deliver up to 5,900 AFY.

⁷ The drought reserve would be accomplished by seasonally treating additional source water (when available) during the months of October through March to build up to a total stored surplus of 1,000 acre-feet in the Seaside Groundwater Basin. During dry years, MRWPCA would reduce the amount of treated water that it injects into the Seaside Groundwater Basin during the peak irrigation demand months (April through September), making more of its source water available to recycle and distribute to meet agricultural irrigation demands in the Castroville Seawater Intrusion Project area. CalAm extractions of GWR-injected water quantities of 3,500 AFY would continue in those years by drawing upon the previously “banked” groundwater up to the amount of drought-reserve water previously injected.

the proposed source waters could provide between 10,478 and over 20,000 AFY, which exceeds the Proposed Project demand requirement of 9,858 AFY. **Appendix B** includes the assumptions regarding source water availability by month to develop the range of potential flows for use in designing Proposed Project facilities. **Appendices O** through **R** listed in **Section 4.18.1** provide the details on how those quantities of water were calculated.

Detailed use scenarios are provided in **Appendix B** to demonstrate some potential operational scenarios that may be used in various water year types to optimize the operations of the Proposed Project. Example future scenarios of water use by the Proposed Project are summarized in **Table 2-12** in **Section 2.0**. As can be seen, the full potential yield of each supply source may not be used in a given year due to the seasonality and annual variability of supplies and demands. Source water usage would decrease in years when the drought reserve is full, and would vary by water year type. The agricultural wash water and the south Salinas stormwater would be stored in the Salinas Treatment Facility ponds seasonally to maximize water inflows to the Regional Treatment Plant during drier times of the year when irrigation demands peak. With the exception of the Blanco Drain Diversion that would require a new pipeline to the Regional Treatment Plant, the existing sanitary sewer collection system would be used to convey the new supplies to the Regional Treatment Plant. The diversion and conveyance infrastructure is discussed in **Section 2.7.2**.

The Proposed Project would prioritize use of unused, excess treated municipal wastewater that would otherwise be discharged through the ocean outfall. This prioritization would minimize the amount of flow discharged to the ocean and the energy use by the Proposed Project for source water diversion, conveyance, and treatment. It is possible that if demand for Castroville Seawater Intrusion Project irrigation water remains constant or drops due to rain events, there could be periods when some of the proposed new source waters would not be diverted to the Regional Treatment Plant for recycling. The prioritization of other source waters would depend primarily on the conditions and contents of the water rights permits and other source water agreements. Along with compliance with conditions and contents of permits and agreements, considerations for choosing which source water(s) to divert to the Regional Treatment Plant would include the following (not in any particular order):

- cost effectiveness and energy efficiency/conservation; and
- treatment process efficiency and water quality optimization, such as salinity for crop irrigation.

Based on these assumptions, less water may be diverted and treated than is expected in the worst-case impacts analysis for the surface water bodies and aquatic habitat impacts in **Section 4.11, Hydrology and Water Quality: Surface Water**, and **4.4, Biological Resources, Terrestrial**, respectively.

Water Rights

Rights to Excess Municipal Wastewater

The owner of a wastewater treatment plant, such as the MRWPCA for the Regional Treatment Plant, has the exclusive right to the treated wastewater it produces as against anyone who has supplied the water discharged into the wastewater collection and treatment system, including a person using water under a service contract (Water Code section 1210). MRWPCA therefore, has the exclusive right to use municipal wastewater that is discharged into the MRWPCA collection system, except as that right has been varied by contractual arrangements. MRWPCA has entered into a number of such contracts as described in **Section 4.18.3.3**, including contracts that assigned rights to Marina Coast Water District and Monterey County Water Resources Agency (Water Resources Agency).

To substantiate the adequacy of MRWPCA's legally-entitled wastewater rights for the Proposed Project when taking into account and respecting the amounts to which Marina Coast Water District and Water Resources Agency are entitled to use, the MRWPCA and MPWMD pursued a MOU Regarding Source Waters and Water Recycling. As discussed above, the MOU reaffirmed Marina Coast Water District and Water Resources Agency's recycled water entitlements, and presented the proposal for collection of additional source waters to recycle and use to meet the two Proposed Project objectives. The MOU is intended to provide a framework for negotiation of a Definitive Agreement and does not create a binding contractual obligation.

The Marina Coast Water District has not exercised its recycled water rights, but could in the future, if water use agreements are obtained from urban irrigators and funding is made available for the construction of the recycled water distribution system. The 2010 Urban Water Management Plan estimates that Marina Coast could use a total of 1,935 AFY for existing irrigation demands. The provision of recycled water for future demands would be dependent upon the amount of wastewater that Marina Coast sends to the Regional Treatment Plant and potentially the availability of seasonal storage. The approved Regional Urban Water Augmentation Program – Recycled Water Project would be expected to provide up to 1,727 AFY (including 300 AFY for uses outside the former Fort Ord). (Marina Coast, 2011, see Table 4.7)

The source water availability analyses performed during project development demonstrated excess municipal wastewater is available every year. During much of a typical year, there is no excess municipal wastewater available because all secondary treated wastewater flows are used by MCWRA in accordance with the MCWRA legal right in the 1992 Agreement, including amendments, to irrigate farmland. This source water type is not available for use by the Proposed Project during peak irrigation seasons and may not be available in some years throughout the spring, summer, and fall. During those periods, supplemental flows are required to ensure adequate secondary-treated effluent flows are available to be treated by the AWT Facility so that it would operate year round and meet the Proposed Project objectives.

Because the MOU is not binding, the parties to the MOU intend to address rights to use wastewater in the forthcoming Definitive Agreement. Although the Definitive Agreement is needed to secure these water rights, the MOU demonstrates a reasonable likelihood that this source of water can be obtained.

Rights to Agricultural Wash Water

As described above, the City of Salinas has the exclusive right to the treated wastewater it collects in its system and treats at the Salinas Treatment Facility, unless modified in a contractual agreement (Water Code section 1210). The City of Salinas has an exclusive right to the agricultural wash water discharged to its system, except as it has been varied by contractual arrangements. No legal agreements for use of agricultural wash water are in effect; although the MRWPCA agreed to temporarily treat the agricultural wash water during 2013 and 2014 over several periods including for an extended period between March 1, 2014 and October 31, 2014. These diversions were approved for the GWR pilot plant, because the city was planning for (and constructing) system improvements, and because the Castroville Seawater Intrusion Project farmers were facing severe reductions in irrigation water availability due to the drought. MRWPCA or its partner agency must enter into a contractual arrangement with the City of Salinas for this source water to be diverted to the Regional Treatment Plant and used to meet the Proposed Project objectives. If a contractual arrangement for diversion and use of the agricultural wash water is not in effect, the Proposed Project may not be able to meet its objectives in certain dry years. Although no agreement for the use of agricultural wash water is

yet in effect, the City of Salinas has been working cooperatively with MRWPCA, demonstrating a reasonable likelihood that this source of water can be obtained.

Rights to Surface Waters (Reclamation Ditch, Tembladero Slough, and Blanco Drain Diversions)

The Monterey County Water Resources Agency is seeking appropriate water rights permits from the State Board to divert and use of several of the source waters. Water that enters surface streams and rivers is considered water of the state. A water rights permit is required to impound or divert waters of the state, except for certain riparian uses. Stormwater runoff from urban areas through storm drain infrastructure (i.e., in the City of Salinas or Monterey) does not become water of the state until it is discharged into a river or channel and rights to use that water are discussed separately below. Transfer of surface water flows out of known and defined channels for recycling would be a consumptive use that may come under the jurisdiction and regulation of the State Board. Three of the proposed source waters – the Blanco Drain, Reclamation Ditch, and Tembladero Slough diversion sites – would require appropriation of surface water under State Board jurisdiction. These source waters include agricultural return flow (overland flow and tile drainage), stormwater flow, and urban runoff.

The Monterey County Water Resources Agency submitted an application in April 2014 to the State Board to divert surface flow in the Blanco Drain and the Reclamation Ditch watershed. Specifically, the Water Resources Agency applied to divert up to 25,000 acre-feet per year from each of the two water bodies at a combined rate of diversion of up to 100 cfs. The following is the project description for the diversion from their Application to Appropriate Water (Downey Brand Attorneys, April 9, 2014):

“MCRWA proposes to divert water from the Blanco Drain and Reclamation Ditch, which carry agricultural return flows and/or municipal runoff to the Salinas River and Tembladero Slough, respectively, for treatment and application to beneficial uses within the Salinas Valley. MCWRA has not yet defined a final project proposal, but expects that the ultimate project will involve construction of a water treatment plant and conveyance facilities leading from the points of diversion to the treatment plant, and from the treatment plant either directly to places of use, or to existing conveyance facilities, which will then carry the water to the places of use. The project will provide a local environmental benefit by reducing the amount of agricultural return flows and/or municipal runoff that reaches local waterways. It will also improve regional water use efficiency and will help reduce pumping by water users from the Salinas Valley Groundwater Basin, which in turn will help prevent and potentially reduce seawater intrusion into the Basin. Approval of the right will not commit MCWRA to any definite course of action. MCWRA will conduct a feasibility study for the project, the results of which will inform MCWRA's decision of whether to pursue the project, and the formulation of a final project proposal. If MCWRA decides to pursue the project, it will prepare an environmental impact report pursuant to the California Environmental Quality Act before making any final decision to approve the project. The EIR will evaluate all aspects of the project, including the effects of the diversion and use of water in accordance with the applied-for water right and any related construction activities. No diversions will occur before MCWRA has complied with CEQA and obtained any necessary permits or approvals from local, state, and federal agencies.”

On November 10, 2014, the State Water Resources Control Board sent a letter stating that staff had found the application was incomplete for several reasons. The parties are currently working together to provide responses to the application deficiencies that are needed to perfect the application.

The MRWPCA and the Water Management District intend to work with MCWRA to replace this application with two or more separate applications addressing each of the proposed source water surface water diversions. The Water Resources Agency would be the permit holder for all water rights granted by the State Board. The new applications would include: applications for 6 cfs each in the Blanco Drain and Reclamation Ditch with higher annual storage limits; and an application for 3 cfs from the Tembladero Slough Diversion site. The 6 cfs quantity was determined to be the peak water flows that could be diverted from the Reclamation Ditch at Davis Road (Schaaf & Wheeler, 2015b) and the peak amount of flow available in the Blanco Drain for diversion in new infrastructure (Schaaf & Wheeler, 2014b). The wastewater collection and conveyance infrastructure between Castroville and the Regional Treatment Plant can only feasibly accommodate flows of up to 3 cfs. Therefore, proposed diversions of 3 cfs from the Tembladero Slough Diversion site would be limited to this amount. Any other application for diversions above these amounts would be the responsibility of Water Resources Agency to take forward as a separate project and is not part of the Proposed Project.

Therefore, several steps still need to be taken to secure the water rights for surface waters from Reclamation Ditch, Tembladero Slough, and Blanco Drain diversions. First, the identified deficiencies in the Water Resources Agency's application need to be corrected, so that the necessary permits can be obtained from the State Board. Second, as noted above, the MOU indicates that the Water Resources Agency would hold all of the permit rights to these waters. A separate agreement would therefore be necessary between the Water Resources Agency and MRWPCA to ensure that the Proposed Project has sufficient water rights to this source. Therefore, these water rights are not secured yet. However, because the Water Resources Agency has submitted an application for water rights, and given the terms of the MOU, there is a reasonable likelihood that this source of water can be obtained.

Rights to Urban Runoff Captured in Municipal Stormwater Infrastructure

As noted above, stormwater runoff from urban areas through storm drain infrastructure (i.e., in the City of Salinas or the City of Monterey) does not become water of the state until it is discharged into a river or channel. The proposed new stormwater runoff diversion at the Salinas Pump Station Diversion site (i.e., at the City of Salinas' "TP1" site) is upstream of any river or open channel in the City of Salinas' storm drainage system and therefore, the diversion of the Salinas stormwater would not occur where it would be considered water of the state. In addition, the diversion of Lake El Estero water by diverting it to the MRWPCA wastewater collection system rather than to the beach in Monterey would not be considered water of the state because those same waters are being pumped or are flowing from the lake to the beach in city storm drainage system pipes. To divert stormwater and dry weather flow from urban areas, agreements are required between MRWPCA and the local agencies that currently collect and convey the flows in man-made facilities for discharge to surface waters, such as Salinas River for the City of Salinas urban runoff/stormwater source water and Monterey Bay for the City of Monterey (for the Lake El Estero source water). MRWPCA is developing an interruptible rate model and criteria which is anticipated to be approved in 2015. The new rate will address capacity and user fees for the various source water within the Proposed Project (Bob Holden, personal communication, January 2015).

Therefore, MRWPCA will need to obtain contractual water rights from the applicable local agencies, including the City of Salinas and the City of Monterey. There are currently no contractual arrangements or permits for the diversion of stormwater. However, the City of Salinas and the City of Monterey have been working cooperatively with MRWPCA, demonstrating a reasonable likelihood that this source of water can be obtained.

Impact Conclusion

The Proposed Project would result in minimal increased water demand due to employment of nine new permanent workers, which could be served by existing water suppliers. The Proposed Project operations would require substantial new source water supplies to meet its project objectives of recycling wastewater for beneficial use as described in **Chapter 2, Project Description**. Technical reports supporting the Proposed Project description and impacts analysis (i.e., those listed in **Section 4.18.1**) and other facts in the record demonstrate that it is reasonably likely that approximately 16,000 to 17,000 AFY of surplus waters can be feasibly be made available to meet Proposed Project demands of approximately 9,860 AFY. For each of the proposed source waters, entitlements or agreements would be needed. The proposed diversions from Reclamation Ditch, Tembladero Slough, and Blanco Drain would require new water rights entitlements from the State Board and contractual arrangements/agreement(s) with Monterey County Water Resources Agency. The Water Resources Agency has filed an application with the State Water Resources Control Board, and it is reasonably likely that rights to these sources of water will be obtained. Similarly, proposed diversions of storm water and diversions of agricultural wash water would require agreements with the City of Salinas and the City of Monterey. Those cities are cooperating with the project partners in designing and evaluating the project components. In addition, the project partners intend to enter into a binding agreement to replace the MOU addressing use of wastewater, facilities at the Regional Treatment Plant, and provision of water supplies to the CSIP.

This EIR addresses the physical environmental effects that would occur due to the diversion and use of the anticipated source waters in the relevant topical sections of this EIR, including, but not limited to, the following sections:

- **Section 4.4, Biological Resources: Fisheries**, addresses impacts on fishery resources in the water bodies potentially affected by the diversions;
- **Section 4.5, Biological Resources: Terrestrial**, addresses impacts to habitat, terrestrial and aquatic (non-fish) species;
- **Section 4.10, Hydrology/Water Quality: Groundwater**, addresses impacts on groundwater; and
- **Section 4.11, Hydrology/Water Quality: Surface Water**, addresses impacts on surface water body flows and levels, flooding, and erosion; and
- **Section 4.12, Land Use, Agricultural and Forest Resources**, impacts to agricultural uses.

This EIR also addresses the environmental consequences of a reduced project alternative in the event that one or more of the sources of water cannot be obtained. No other replacement sources are likely to be feasible within the time period needed to accomplish the project objectives. See **Chapter 6, Alternatives to the Proposed Project**.

The impacts analysis in this section and the remainder of this EIR addresses potential physical environmental effects of diversion and use of all source waters proposed to be diverted for the Proposed Project.

Prior to construction of each source water diversion component and prior to diversion of secondary-treated wastewater effluent to the Advanced Water Treatment Facility, the Proposed Project proponent(s) would obtain approval of each applicable water rights permit or agreement with the relevant entities with ownership or jurisdiction over that

source water. Therefore, the Proposed Project would result in a less-than-significant impact related to the need to obtain new or expanded entitlements to divert source waters for recycling and reuse. The indirect impacts of entering into agreements and receiving water rights to divert the proposed source waters are provided in **Sections 4.2** through **4.17** of this EIR.

Impact WW-4: Operational Wastewater Treatment Capacity. Operation of the Proposed Project would not result in a determination by the wastewater treatment provider that would serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments. (Criterion c) (Less than Significant)

Wastewater Generated By Project Employees

Project implementation would generate nine new permanent jobs within the service area of the MRWPCA. 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 wastewater treatment would result from the addition of the nine new permanent jobs during operation of the project. The Regional Treatment Plant has an average dry weather design capacity of 29.6 mgd and a peak wet weather design capacity of 75.6 mgd. It currently receives and treats approximately 16 to 17 mgd of wastewater and therefore has capacity to treat additional flows. Therefore, existing wastewater capacity would be sufficient to serve operational demands, and thus the impact is considered less than significant.

Wastewater Treatment and Outfall Disposal Capacity for Project Operations

Treated municipal wastewater is currently used to produce recycled water at the Salinas Valley Reclamation Plant. Approximately 8,225 AFY⁸ of secondary effluent is currently discharged to the Monterey Bay through the Regional Treatment Plant outfall that is not treated at the tertiary level at the Salinas Valley Reclamation Plant for Castroville Seawater Intrusion Project irrigation water supplies. Under the Proposed Project, less secondary effluent would be discharged through the Regional Treatment Plant outfall because most of the secondary effluent would be treated at the Advanced Water Treatment Plant for recharge into the Seaside Basin. As indicated above in **Section 4.18.2.2**, a 40-year wastewater flow projection analysis concluded that the existing Regional Treatment Plant has capacity to treat additional wastewater flows in the future. In addition, the existing outfall has capacity (i.e., between 11 mgd and 29.6 mgd remaining capacity) to accommodate disposal of by-product wastewater from the Proposed Project Advanced Water Treatment Facility (i.e., reverse osmosis concentrate). The amount of wastewater to be disposed from the Advanced Wastewater Treatment Facility would be less than 1 mgd. Therefore, the existing Regional Treatment Plant and ocean outfall, both have capacity to treat additional flows of over 10 mgd compared to existing flows.

Figure 2.12, in **Chapter 2, Project Description**, provides an overview graphic of the existing design capacities, average dry weather flows, and peak wet weather flows at each pump station in the MRWPCA wastewater collection system. The existing wastewater interceptor pipeline system has currently unused or excess conveyance capacity to accommodate increased flows under the Proposed Project. Impacts of construction and operation of additional improvements have been identified in appropriate impact sections of this EIR.

⁸ Based on the five year average of measure flows from 2009 through 2013.

Impact Conclusion

The Proposed Project would result in a minimal increased wastewater treatment demand due to employment of nine new permanent workers and the Proposed Project would increase wastewater flows to the Regional Treatment Plant and use of treated wastewaters. Proposed Project operations could be served by the existing capacity at the Regional Treatment Plant, taking into account MRWPCA's service commitments, resulting in a less-than-significant impact on wastewater treatment services. No mitigation measures are required.

4.18.4.5 Cumulative Impacts and Mitigation Measures

The geographic scope for cumulative impact analysis of water supply and wastewater systems consists of the service areas for area water suppliers and MRWPCA for wastewater treatment. Cumulative projects are provided on **Table 4.1-2** (see **Section 4.1**). No construction-related significant water supply or wastewater cumulative impacts have been identified for the cumulative projects.

The discussion of cumulative impacts is organized to address the combined impacts of the Proposed Project plus the Monterey Peninsula Water Supply Project (MPWSP) (with the 6.4 mgd desalination plant) and then to address the overall combined impacts of the Proposed Project and all relevant projects and/or regional growth projections:

- *Combined Impacts of Proposed Project Plus MPWSP* (with 6.4 mgd Desalination Plant) (referred to as the MPWSP Variant):⁹ The CalAm Monterey Peninsula Water Supply Project includes: a seawater intake system; a source water pipeline; a desalination plant and appurtenant facilities; desalinated water conveyance facilities, including pipelines, pump stations, a terminal reservoir; and an expanded ASR system, including two additional injection/extraction wells (ASR-5 and ASR-6 Wells), a new ASR Pump Station, and conveyance pipelines between the wells. The CalAm Distribution Pipelines (Transfer and Monterey) would be constructed for either the MPWSP or GWR project. The overall estimated construction schedule would be from June 2016 through March 2019 for the combined projects, during which time the construction schedules could overlap for approximately 18 months (mid-summer 2016 through December 2017). The cumulative impact analysis in this EIR anticipates that the Proposed Project could be combined with a version of the MPSWP that includes a 6.4 mgd desalination plant. Similarly, the MPSWP EIR is evaluating a "Variant" project that includes the proposed CalAm Facilities (with the 6.4 mgd desalination plant) and the Proposed Project. The impacts of the Variant are considered to be cumulative impacts in this EIR. The CalAm and GWR Facilities that comprise the MPSWP Variant are shown in **Appendix Y**.
- *Overall Cumulative Projects*: This impact analysis is based on the list of cumulative projects provided on **Table 4.1-2, Project Considered for Cumulative Analysis** (see **Section 4.1**). The overall cumulative impacts analysis considers the degree to which all relevant past, present and probable future projects (including the MPSWP with the 6.4 mgd desalination plant) could result in impacts that combine with the impacts of the Proposed Project.

⁹ The October 2012 Notice of Preparation of an EIR for the MPWSP describes an alternative to the MPWSP that would include a smaller desalination plant combined with the Proposed GWR Project (CPUC 2012). Based on ongoing coordination with the CPUC's EIR consultants, this alternative is referenced as the "Variant" and includes a 6.4 mgd desalination plant that was proposed by CalAm in amended application materials, submitted in 2013 to the CPUC (CPUC, 2013).

Combined Impacts of Proposed Project Plus MPSWP (with 6.4 mgd Desalination Plant). Both the Monterey Peninsula Water Supply Project with 6.4 mgd Desalination Plant and the Proposed Project would result in construction of new water supply infrastructure facilities. Regarding operational cumulative impacts, both projects would provide replacement potable water for a portion of CalAm's withdrawals from the Carmel River system as explained in **Chapter 2**. As such, project operations would not result in potable water demand, except for daily employee water use consumed by 34 to 39 new employees (nine to operate and maintain the GWR Proposed Project and 25 to 30 to operate and maintain the desalination project, which would be negligible given the amount of water used in the region). Both projects would result in a minimal increased wastewater treatment demand due to employment of new permanent workers, operations could be served by the existing capacity at the Regional Treatment Plant, taking into account MRWPCA's service commitments. As discussed in this section, the Proposed Project would increase wastewater flows to the Regional Treatment Plant and expand use of recycled wastewater. Adequate capacity exists in the Regional Treatment Plant for treatment of wastewater from the new combined number of employees, in addition to the existing municipal wastewater flows and new source water inflows proposed to be diverted into the Regional Treatment Plant (see **Appendix B** and **Appendix X**). Therefore, the combined projects would not result in significant cumulative water supply demand and wastewater generation.

Overall Cumulative Impacts. Cumulative projects are shown on **Table 4.1-2** (see **Section 4.1**), and cumulative project locations are shown on **Figure 4.1.1, Cumulative Projects Location Map**. The cumulative projects are cross-referenced (in parentheses) to the project number on **Table 4.1-2**. Many of the cumulative projects are public infrastructure (#1, 2, 4, 5, 11, 18-20, 23, 25-29, 32, 33, 35), institutional (#16, 17) or public recreation (#34) projects. Most of the other cumulative projects identified on **Table 4.1-2** are residential, commercial, institutional and/or mixed-use development project that would result in increased demands on potable water supplies within the service areas of the Marina Coast Water District, CalAm, and/or the Sand City desalination plant.

The Proposed Project is an infrastructure project to provide replacement potable water for a portion of CalAm's withdrawals from the Carmel River system as explained in **Chapter 2**, and as such, project operations would not result in potable water demand, except for daily employee water use consumed by nine new employees. The new employees would be distributed throughout the Proposed Project sites as shown on **Table 2-9**. Over half of the new Proposed Project employees (up to six) would be at sites that are not served by CalAm or Marina Coast Water District, and thus, would not contribute to cumulative water demands within these service areas. It appears that the remaining three new employees would be at Proposed Project sites that are within the CalAm service area. Cumulative development within the CalAm service area consists of development projects within the cities of Seaside and Monterey. In the absence of project-level water demand estimates for all cumulative development projects, it is assumed that cumulative water demand would be a potentially significant cumulative impact given the current limitations within the CalAm service area. The amount of daily water demand generated by new Project employees within the CalAm service area would be a negligible amount in comparison to cumulative demands, and the Proposed Project's incremental contribution to cumulative water demand would not be cumulatively considerable.

As discussed in **Section 4.18.2.2**, a 40-year wastewater flow projection analysis was conducted as part of the planning for the Proposed Project (see **Appendix X**). That report found that wastewater flows to the Regional Treatment Plant will continue to decrease until approximately the year 2030. After 2030, based on the "high" and "low" projections of regional population growth and assuming a minimum of 59.0 gallons per capita per day, flows are projected to

increase and may range between 22.7 and 24.3 mgd by the year 2055, i.e. 77% to 82% of Regional Treatment Plant design capacity (Brezack & Associates, Inc., 2014). These projected increases in wastewater flows to the Regional Treatment Plant are dependent upon implementation of regional growth plans reflected in city and county General Plans. Such growth is uncertain, and therefore increased wastewater flows conservatively have not been assumed for purposes of defining the quantities of source water needed for the Proposed Project. If, however wastewater flows do increase in the future, the diversions of one or more of the proposed new source waters would be reduced and/or curtailed due to the ability to use excess flows at the Regional Treatment Plant in lieu of diverting the new source waters. Therefore, even if future increases in municipal wastewater flows occur, the Regional Treatment Plant capacity would not require expansion due to the Proposed Project. It is possible that in the future, additional demands for recycled water would trigger new and expanded recycling facilities (and potentially expanded primary and secondary treatment capacity) at the Regional Treatment Plant to enhance the water supply portfolios of regional water purveyors. These potential future expansions of the Regional Treatment Plant primary and secondary treatment processes would have similar impacts as the proposed Treatment Facilities at the Regional Treatment Plant; however, they are not part of the Proposed Project evaluated in this EIR. If expansion of the Regional Treatment Plant capacity is required in the future, any needed CEQA compliance would be performed at that time.

The existing Regional Treatment Plant has capacity to treat additional projected future flows, and no significant cumulative impacts related to wastewater treatment plant capacity have been identified.

In addition, the flows of wastewater for discharge to the ocean outfall would continue to decrease due to increased use of wastewater effluent for recycling by the existing Castroville Seawater Intrusion Project. Therefore, additional outfall capacity is assumed to be available in the future with and without implementation of the Proposed Project. Cumulative projects that propose to discharge desalination brine include the Monterey Peninsula Water Supply Project (#1) and the Marina Coast Water District desalination project (referred to as the Regional Urban Water Augmentation Project, Desalination component - #18). These projects propose to discharge up to 9 mgd and approximately 3 mgd of brine, respectively, and the Proposed Project would discharge up to 0.94 mgd of reverse osmosis concentrate for a total of approximately 13 mgd on average. These quantities would not exceed the outfall's capacity given that during wet weather events, the outfall can dispose up to 75.6 mgd, and continued reductions in municipal wastewater ocean discharges are anticipated due to increased recycling by Salinas Valley Reclamation Plant for the benefit of the Castroville Seawater Intrusion.

Thus, there would be no significant cumulative impacts on wastewater treatment capacity or ocean outfall disposal capacity.

Impact of the Proposed Project on MCWD Rights to Recycled Water. The RUWAP Recycled Water Project is a cumulative project because although portions have been constructed, it is not yet operating because it lacks funding for critical transmission infrastructure and user agreements. Because the Proposed Project would rely upon new source waters during the irrigation months of April through September to meet its needs (see **Appendix B**), it would not have an adverse impact on the ability of Marina Coast Water District to use its share of recycled water from the existing municipal wastewater flows as described in the 1989, and 1996 Agreements that are described above in **Section 4.18.3.4**. The MOU indicates that the Proposed Project would not use secondary effluent flows that represent the amount of wastewater committed to use by Marina Coast Water District. In the future, when Marina Coast completes construction of its recycled water system and enters into user agreements with urban irrigators, the wastewater flows committed to those demands would be provided.

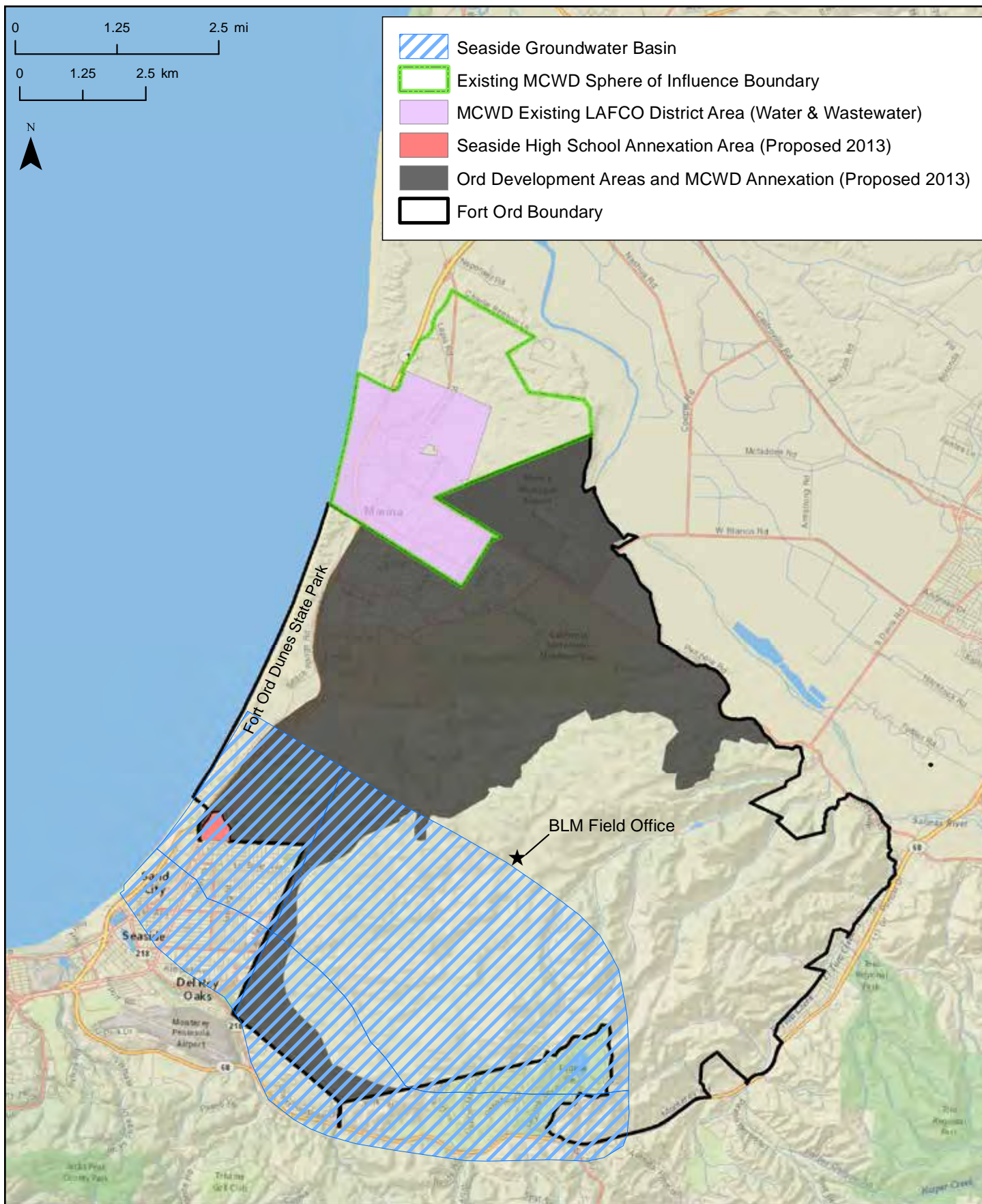
Cumulative Impact Conclusion

The combined MPWSP and GWR projects would result in minor demand for water and wastewater service due to new employees, which would not be cumulatively considerable due to the lack of substantial numbers of new employees. While overall cumulative development within the CalAm service area could result in a potentially significant cumulative impact given the current limitations within the CalAm service area, the amount of daily water demand generated by new Project employees within the CalAm service area would not be cumulatively considerable. The existing Regional Treatment Plant has capacity to treat additional projected future flows, and no significant cumulative impacts related to wastewater treatment plant capacity have been identified. There would be no significant cumulative impacts on wastewater treatment capacity or ocean outfall disposal capacity.

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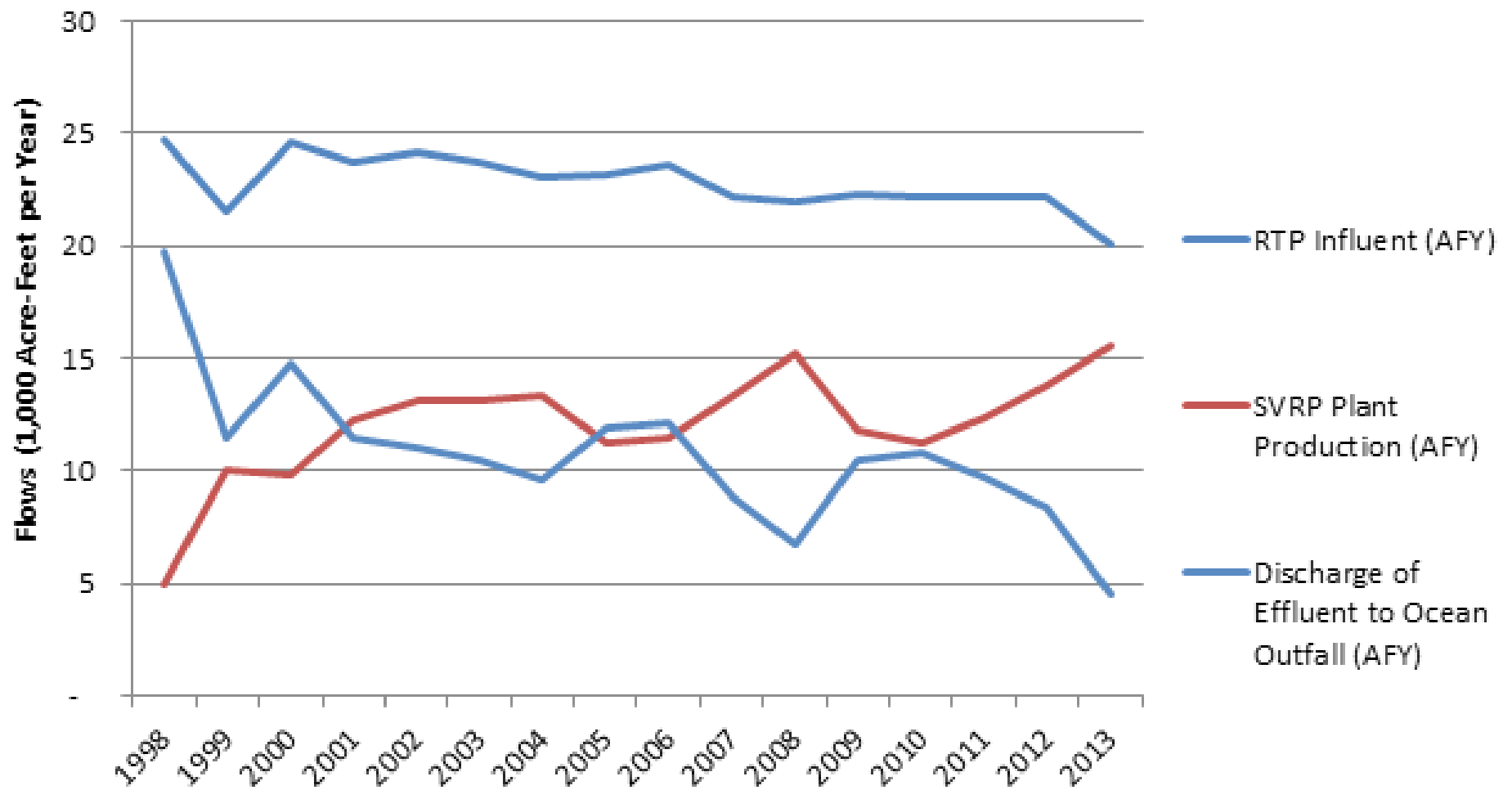


Marina Coast Water District Boundaries and Service Areas

April 2015

Pure Water Monterey GWR Project
Draft EIR

Figure
4.18-1



Source: Brezack & Associates, 2014



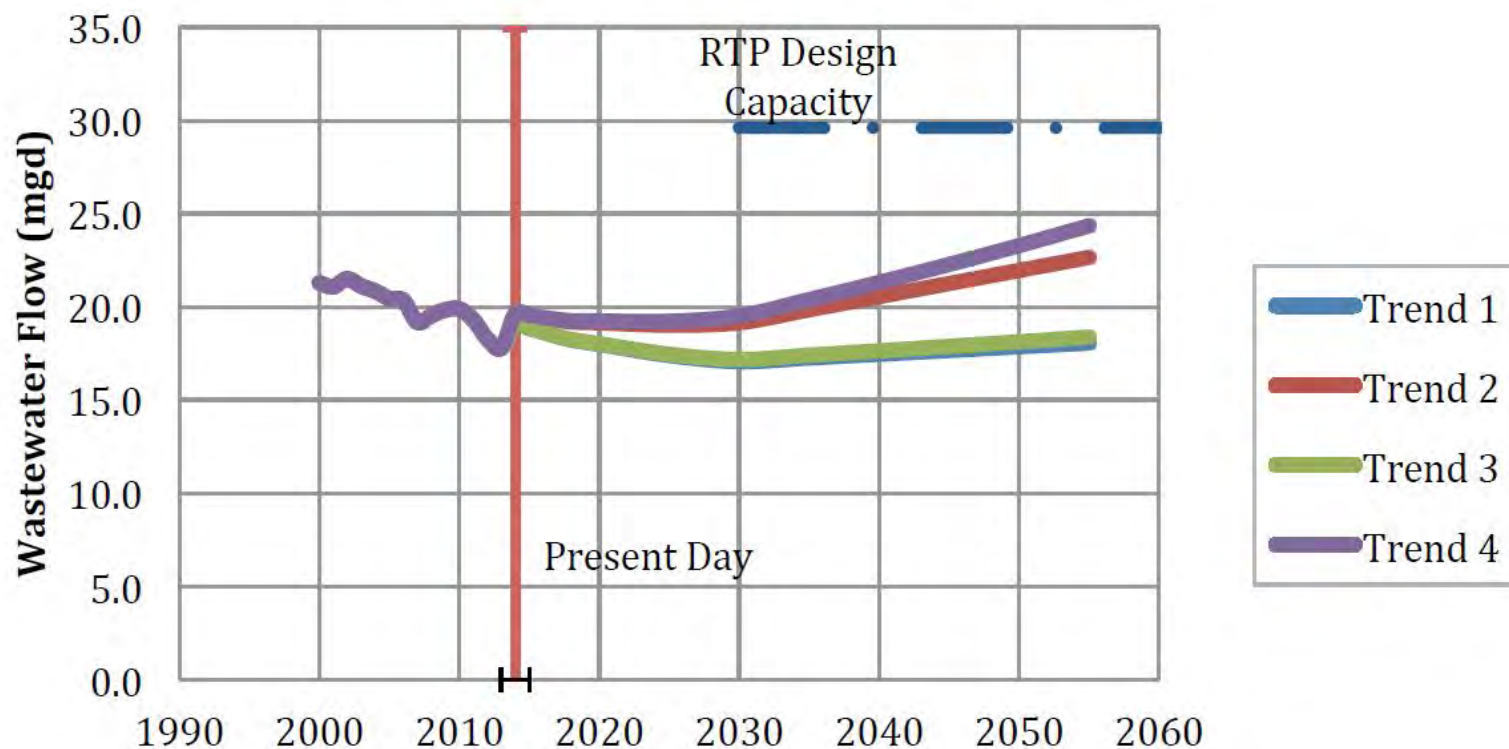
Average Annual Wastewater Flow to Regional Treatment Plant

April 2015

Pure Water Monterey GWR Project
Draft EIR

Figure
4.18-2

RTP Flow Projections



Legend Entry	Description
Trend 1	A linear curve is fitted to data from year 2000 to 2012
Trend 2	A linear curve is fitted to data from year 2006 to 2012
Trend 3	An exponential curve is fitted to data from year 2000 to 2012
Trend 4	An exponential curve is fitted to data from year 2006 to 2012

Source: Brezack & Associates, 2014



Regional Treatment Plant Wastewater Flow Projections

April 2015

Pure Water Monterey GWR Project
Draft EIR

Figure
4.18-3

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