

## **Notice of Preparation of a Supplemental Environmental Impact Report and Public Scoping Meeting Notice**

**To:** California Office of Planning and Research; Responsible and Trustee Agencies; County Clerks; and Other Interested Parties

**Subject:** Notice of Preparation of a Supplemental Environmental Impact Report and Public Scoping Meeting Notice

**Project:** Expanded Pure Water Monterey Groundwater Replenishment Project

**Lead Agency:** Monterey One Water

**Date:** May 15, 2019

This Notice of Preparation (NOP) has been prepared to notify agencies and interested parties that Monterey One Water (M1W), formerly Monterey Regional Water Pollution Control Agency, as the Lead Agency is beginning preparation of a Supplemental Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA) for the proposed expansion of the Pure Water Monterey Groundwater Replenishment Project (Expanded PWM/GWR Project). M1W, in conjunction with the Monterey Peninsula Water Management District (MPWMD), is proposing an expansion of the capacity of the PWM/GWR Project which is currently under construction. The PWM/GWR Project's Advanced Water Purification Facility would be expanded from the current 5 million gallons per day (mgd) plant to up to a 7.6 mgd maximum capacity plant to enable an increase in groundwater replenishment from 4 mgd to up to 7.6 mgd. The proposed Expanded PWM/GWR Project also includes associated conveyance, injection and extraction facilities, as described below.

The proposed Expanded PWM/GWR Project would reduce discharges of secondary effluent to Monterey Bay and would replenish the Seaside Groundwater Basin with approximately 2,250 AFY of additional purified recycled water. Combined with the existing PWM/GWR Project yield this expansion would result in a total water supply yield of approximately 5,750 AFY to replace existing water supplies for California American Water Company's (CalAm) Monterey District service area and enable CalAm to comply with the State Board's Cease and Desist Order (Orders 95-10, 2016-0016) as amended. At this time, the Expanded PWM/GWR Project is considered a "back-up plan" to the Monterey Peninsula Water Supply Project (MPWSP), CalAm's planned 6.4 mgd desalination project. The Expanded PWM/GWR Project would be implemented in the event that the MPWSP encounters obstacles that prevent timely, feasible implementation.

This Notice of Preparation (NOP) includes a brief description of the Expanded PWM/GWR Project and the environmental topics to be addressed in the Supplemental EIR. The proposed expansion would constitute a change to the previously approved PWM/GWR Project. Therefore, the Supplemental EIR will evaluate whether any new or substantially more severe impacts on the environment would result from the project changes, compared to the environmental impacts

disclosed in the previously certified PWM/GWR Project EIR and Addenda. The Supplemental EIR also will incorporate the applicable mitigation measures that were identified in the previously certified EIR and Addenda.

M1W is soliciting comments from all interested persons, responsible and trustee agencies and organizations as to the scope and content of the Supplemental EIR and the environmental information to be analyzed in connection with the proposed Expanded PWR/GWR Project. The Final EIR for the PWM/GWR Project was certified in October 2015. Addenda to that EIR were approved in June 2016 (Addendum No. 1), February 2017 (Addendum No. 2), and October 2017 (Addendum No. 3). The Final EIR and Addenda to the EIR can be found at the following link <http://purewatermonterey.org/reports-docs/>.

In accordance with CEQA, agencies and the public are requested to review the description of the Expanded PWM/GWR Project provided in this NOP and provide comments on environmental issues related to the commenting agencies' statutory responsibilities. The Supplemental EIR will be used by M1W, MPWMD and other Responsible Agencies when considering approval of the Expanded PWM/GWR Project.

**Location:** The Expanded PWM/GWR Project would be located within northern Monterey County and would include facilities located within the City of Seaside and portions of the unincorporated Monterey County, as shown in Figures 2 and 3. The Expanded PWM/GWR Project would increase the amount of purified recycled water available to replenish the Seaside Groundwater Basin, replacing existing water supplies for CalAm's Monterey District service area and enabling CalAm to comply with the State Board's Cease and Desist Order as amended. The NOP is available at <http://www.purewatermonterey.org> and at M1W's offices, located at 5 Harris Court, Building D Monterey, CA 93940.

**Comments on the NOP must be received by M1W no later than 30 days after publication of this NOP.** The NOP has been made available for public review on May 15, 2019.

Comments on this NOP must be received no later than **June 14, 2019** at 5 PM. Please send your comments, including a return address, contact name, and email to this address:

Mail: Monterey One Water                      Email: [purewatermontereyinfo@my1water.org](mailto:purewatermontereyinfo@my1water.org)  
Attn: Rachel Gaudoin  
5 Harris Court, Building D, Monterey, CA 93940

**Public Scoping Meeting:** A public meeting will be held to receive public comments and suggestions on the scope of the Supplemental EIR. The scoping meeting will be open to the public on the following date in the following location:

Wednesday, June 5, 2019 at 5:30 p.m.  
Oldemeyer Center: Blackhorse Meeting Room  
986 Hilby Avenue, Seaside, CA 93955

# Expanded Pure Water Monterey Groundwater Replenishment Project

## Notice of Preparation

### Introduction and Background

Monterey One Water (M1W, formerly the Monterey Regional Water Pollution Control Agency or MRWPCA), in partnership with the Monterey Peninsula Water Management District (MPWMD), is proposing an expanded Pure Water Monterey Groundwater Replenishment Project (Expanded PWM/GWR Project) to create a reliable source of water supply to replace existing water supply sources for the Monterey Peninsula in northern Monterey County. **Figure 1** below shows M1W's existing infrastructure and service area. The Expanded PWM/GWR Project would increase the amount of purified recycled water produced by the PWM/GWR Project that is currently under construction.

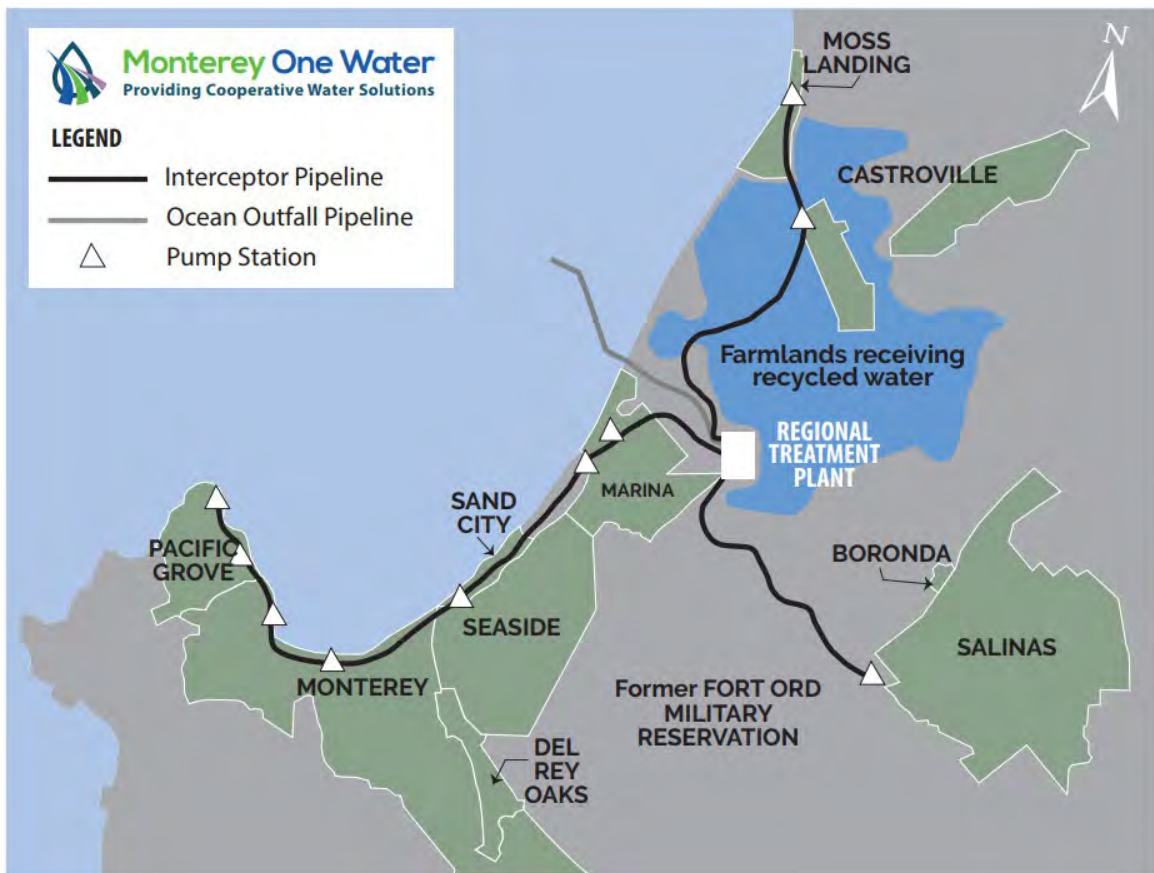


Figure 1. M1W Service Area

As approved, the PWM/GWR Project will create a reliable source of water supply by taking highly-treated water from the Advanced Water Purification Facility (AWPF)<sup>1</sup> and recharging the Seaside Groundwater Basin with the treated water using a series of shallow and deep injection wells. Once injected into the Seaside Groundwater Basin, treated water will mix with the groundwater present in the aquifers and be stored for future extraction and use. The primary purpose of the approved PWM/GWR Project is to provide 3,500 acre-feet per year (AFY) of high quality replacement water to California American Water Company (CalAm) for delivery to its customers in the Monterey District service area; thereby enabling CalAm to reduce its diversions from the Carmel River system by this same amount<sup>2</sup>. CalAm is under a state order to secure replacement water supplies by December 2021.<sup>3</sup> (Please refer to discussion below for a full description of the approved PWM/GWR Project). **Figure 2** shows the approved PWM/GWR Project facility locations.

The Expanded PWM/GWR Project would increase the AWPF peak capacity from the current 5 million gallons per day (mgd) to 7.6 mgd and increase recharge of the Seaside Groundwater Basin with high quality purified water by an additional 2,250 AFY (for a total PWM/GWR Project yield of 5,750 AFY). At this time, the Expanded PWM/GWR Project is considered a “back-up plan” to the MPWSP, CalAm’s planned 6.4 mgd desalination project. The Expanded PWM/GWR Project would be implemented in the event that the MPWSP encounters obstacles that prevent its timely, feasible implementation. The Expanded PWM/GWR Project would include the following new or modified M1W facilities:

- improvements to the existing PWM/GWR Project AWPF (adding equipment, pipelines, and storage within the existing plant site);
- up to 2 miles of new purified water conveyance pipelines;
- one new injection well at a new eastern wellfield area and associated infrastructure;
- relocation of one approved injection well site and associated infrastructure to the eastern wellfield area; and
- relocation of previously approved monitoring well sites to the area between a new eastern injection well area and extraction wells along General Jim Moore Boulevard.

---

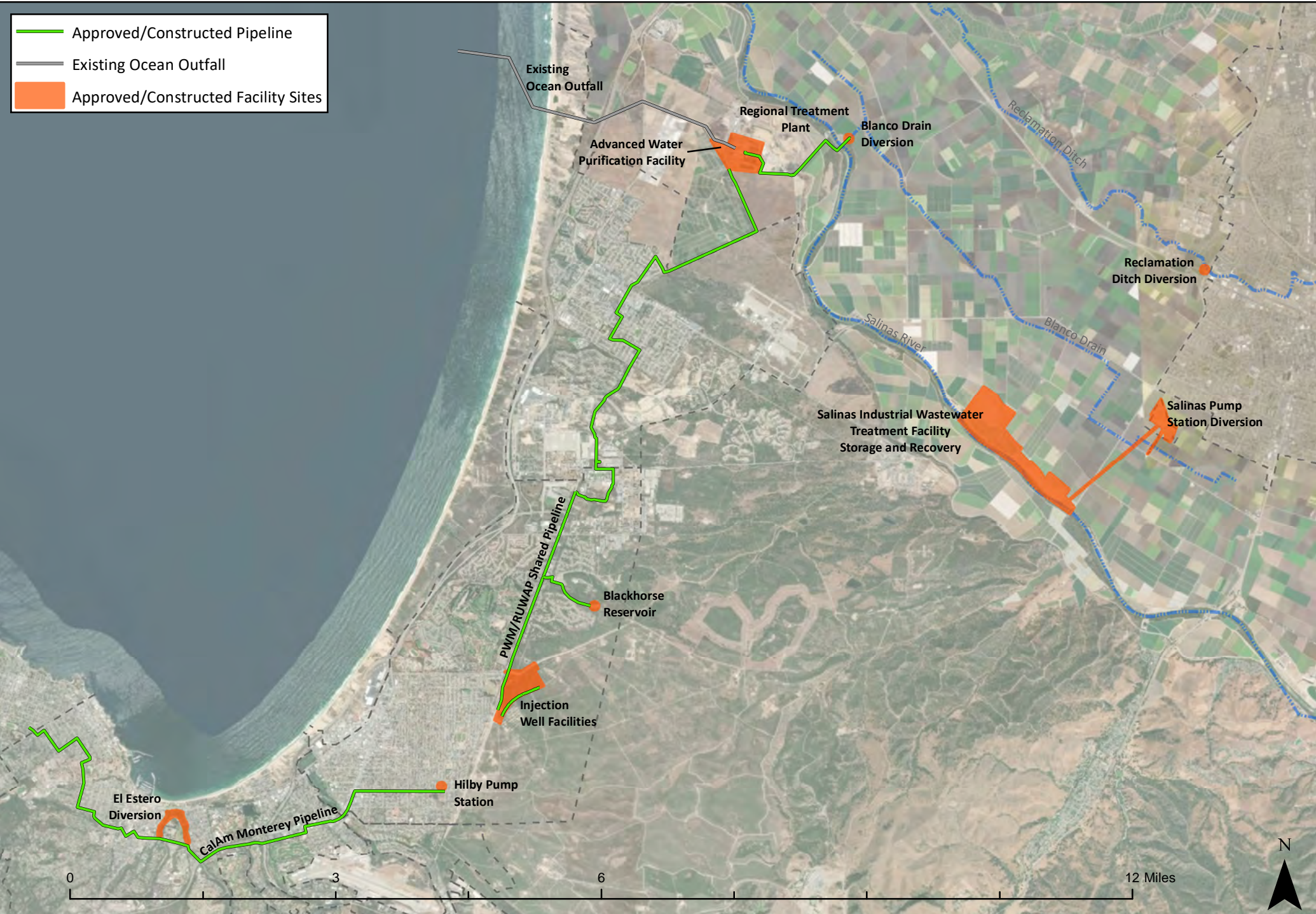
<sup>1</sup> Also referred to as the Advanced Water Treatment Facility (AWTF).

<sup>2</sup> The approved PWM/GWR Project also includes a drought reserve component to support crop irrigation during dry years. Under this component, an extra 200 AFY of advanced treated water will be injected in the Seaside Groundwater Basin during normal and wet years, up to a total of 1,000 AF, to create a “banked reserve.” During drought years, M1W will reduce the amount of water injected into the Seaside Groundwater Basin in order to increase production of recycled water for crop irrigation. CalAm will be able to extract the banked water in the Seaside Groundwater Basin to make up the difference to its supplies, such that its extractions and deliveries will not fall below 3,500 AFY.

<sup>3</sup> The State Water Resources Control Board’s Cease and Desist Order 95-10 required the reduction of CalAm pumping from the Carmel River; Order 2016-16 extended the time period for withdrawals above legal limits from the Carmel River through 2021.



- Approved/Constructed Pipeline
- Existing Ocean Outfall
- Approved/Constructed Facility Sites



In order for CalAm to pump additional groundwater injected by the Expanded PWM/GWR Project into the Seaside Groundwater Basin and deliver it to meet its system demands, the following CalAm potable water system improvements would be required:

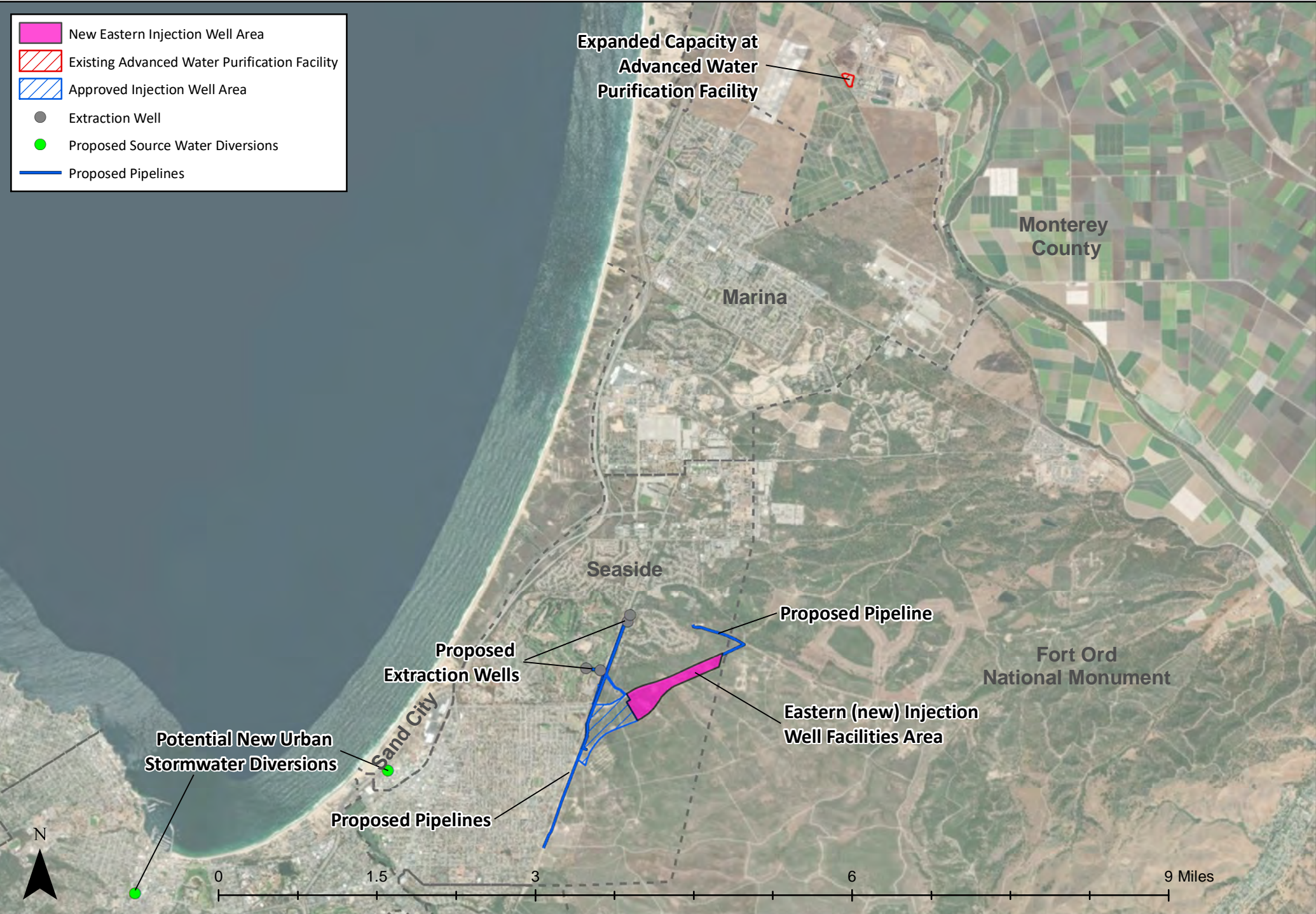
- two (2) new extraction wells, plus two (2) new extraction wells for system redundancy and associated infrastructure;
- wellhead disinfection (chlorination) treatment systems at the existing Paralta Well and two new extraction wells; and
- potable and raw water pipelines along General Jim Moore Boulevard and at the Seaside Middle School site.

In addition, one or more future urban storm water to sanitary sewer diversions (such as planned sanitary sewer diversion projects in Seaside and Monterey) may provide additional source water for the Expanded PWM/GWR Project. The locations of the above-described facilities are shown on **Figure 3**. These additional source waters are not necessary to achieve the Expanded PWM/GWR Project's recycled water yield objective of an additional 2,250 AFY of replacement supplies, nor would these additional source waters increase the Expanded PWM/GWR Project yield above 2,250 AFY. Rather, these additional source waters, if they come to fruition, would provide greater supply reliability for the Expanded PWM/GWR Project.

### **Monterey One Water**

M1W was established in 1979 under a Joint Powers Authority agreement between the City of Monterey, the City of Pacific Grove and the Seaside County Sanitation District. M1W currently operates the regional wastewater treatment plant, including a water recycling facility (collectively, known as the Regional Treatment Plant or RTP), a non-potable water distribution system known as the Castroville Seawater Intrusion Project (CSIP), sewage collection pipelines, and wastewater pump stations. M1W's RTP is located two miles north of the City of Marina, on the south side of the Salinas River, and has a permitted capacity to treat 29.6 mgd of wastewater effluent. At the RTP, water is treated to meet Title 22 California Code of Regulations (CCR) Standards (tertiary filtration and disinfection) for unrestricted agricultural irrigation use, and the remainder is treated to meet secondary effluent water quality standards and the California Ocean Plan in M1W's National Pollutant Discharge Elimination System (NPDES) permit for ocean discharge. Commencing in 2019 with the startup and operation of the PWM/GWR Project, a portion of secondary effluent flows will be treated to Title 17 and Title 22 CCR at the AWPf for groundwater replenishment of the Seaside Groundwater Basin (Please refer to the below discussion for more detail on the PWM/GWR Project under construction).





- New Eastern Injection Well Area
- Existing Advanced Water Purification Facility
- Approved Injection Well Area
- Extraction Well
- Proposed Source Water Diversions
- Proposed Pipelines

## Expanded Pure Water Monterey Project Overview Map

Document Path: G:\GIS\GIS\_Projects\2013\_13 GWRF\Final Product\Expanded Capacity Project\COverall\_Expanded Capacity Project Map 05/02/2019.mxd

## **Seaside Groundwater Basin**

The Seaside Groundwater Basin underlies an approximately 19- square-mile area underlying the Cities of Seaside, Sand City, and Del Rey Oaks, California State University Monterey Bay to the north, and open space overlying the former Fort Ord from the City of Seaside Boundary east to approximately Laguna Seca raceway, adjacent to Monterey Bay. A steep decline in groundwater elevation since 1995 in the northern coastal portion of the basin, where most of the groundwater production occurs, has coincided with increased extraction in that area after the State Water Resources Control Board required CalAm to reduce its Carmel River diversions, and instead maximize its pumping in the Seaside Groundwater Basin. Historical and persistent low groundwater elevations caused by pumping have led to concerns that seawater intrusion may threaten the Seaside Groundwater Basin's groundwater resources. 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: CalAm, City of Seaside, Sand City, City of Monterey, City of Del Rey Oaks, MPWMD 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 does not appear to be occurring at present, current water levels are lower than those required to protect against seawater intrusion. Water levels were found to be below sea level in both the Paso Robles (the shallower aquifer) and the Santa Margarita aquifers of the Seaside Groundwater Basin in 2012; therefore, it is recognized that recharge into both aquifers would be beneficial for protection against seawater intrusion.

## **State Orders to Reduce Carmel River Diversions**

The 255-square-mile Carmel River Basin is bounded by the Santa Lucia Mountains to the south and the Sierra del Salinas to the north. The Carmel Valley aquifer, which underlies the alluvial portion of the Carmel River downstream of San Clemente Dam, is about six square-miles and is approximately 16 miles long. In the summer and fall, the alluvial aquifer is drawn down by CalAm and private pumpers. Historically, this combined pumping has resulted in dewatering of the lower six miles of the river for several months in most years and up to nine miles in dry and critically dry years.

In 1995, the State Water Resources Control Board issued Order No. WR 95-10, which found that CalAm was diverting more water from the Carmel River Basin than it was legally entitled to divert. The State Water Resources Control Board ordered CalAm, instead, to maximize diversions (to the extent feasible) from the Seaside Groundwater Basin and endeavor to secure a legal replacement supply. In addition, a subsequent Cease and Desist Order (SWRCB Order No. 2009-0060) issued in 2009 required CalAm to secure replacement water supplies for its Monterey District service area and reduce its Carmel River diversions to 3,376 AFY by the 2016-17 timeframe. In July 2016, the State Water Resources Control Board issued Order 2016-0016, amending the Cease and Desist Order by extending the time period for unauthorized withdrawals from the Carmel River through December 31, 2021.



CalAm, working with local agencies, has proposed construction and operation of a CalAm owned and operated desalination project (known as the Monterey Peninsula Water Supply Project or MPWSP)<sup>4</sup> to provide a part of the replacement water needed to comply with the Cease and Desist Order as amended and the Seaside Groundwater Basin Adjudication, in conjunction with the PWM/GWR Project. The California Public Utilities Commission, as the CEQA lead agency for the MPWSP, published the Final EIR/EIS in March 2018, and approved the MPWSP in September 2018.

## **Approved PWM/GWR Project Facilities and CEQA Documentation**

### **Previously Approved Pure Water Monterey Groundwater Replenishment Project**

On October 8, 2015, the Board of Directors of M1W approved the PWM/GWR Project as modified by the Alternative Monterey Pipeline and the Regional Urban Water Augmentation Project<sup>5</sup> (RUWAP) alignment for the product water conveyance system and certified the Final EIR (PWM/GWR EIR) (State Clearinghouse No. 2013051094). The stated primary objective of the PWM/GWR Project was to replenish the Seaside Groundwater Basin with 3,500 AFY of purified recycled water to replace a portion of CalAm's water supply as required by State Water Resources Control Board orders. The originally approved PWM/GWR Project included a 4 mgd capacity AWPf for treatment and production of purified recycled water that will be conveyed for injection into the Seaside Groundwater Basin using a series of shallow and deep injection wells. The injected water will then mix with the existing groundwater and be stored for urban use by CalAm, thus enabling a reduction in Carmel River system diversions by the same amount. CalAm will recover the groundwater at existing wells (indirect potable reuse). PWM/GWR Project product water conveyance facilities include ten miles of pipeline from the AWPf to injection wells in the Seaside Groundwater Basin.

### **Previously Approved Pure Water Monterey Groundwater Replenishment Project Expansion**

On October 30, 2017, the Board of Directors of M1W approved modifications to the PWM/GWR Project to increase the operational capacity (peak or maximum product water flowrate) of the approved AWPf from 4.0 mgd to 5.0 mgd. This expanded capacity is achieved by using redundancies in the AWPf design and the purpose of the expansion is to enable delivery of 600 AFY of purified recycled water to Marina Coast Water District (MCWD) for urban landscape irrigation by MCWD customers. The additional recycled water delivery is a component of the approved RUWAP, an urban recycled water project developed by MCWD. The source water for the capacity expansion is entirely from contractual rights to the return of its municipal wastewater in addition to a portion of M1W's summer water allocation per the Amended and Restated Water Recycling Agreement. In April 2016 (amended in October 2017), M1W Board of Directors approved joint (shared) use of product water storage and conveyance facilities,

---

<sup>4</sup> CalAm submitted Application A.12-04-019 (*Application of CAW for Approval of the Monterey Peninsula Water Supply Project*) to the California Public Utilities Commission.

<sup>5</sup> The RUWAP is a recycled water project developed by MCWD in cooperation with M1W. RUWAP was originally developed to help MCWD meet the overall needs of its service area, delivering tertiary-treated and disinfected recycled water produced at the existing Salinas Valley Reclamation Plant ("SVRP") to urban users in the MCWD service area and former Fort Ord.

including Blackhorse Reservoir, with MCWD for the RUWAP and the PWM/GWR Projects (PWM/GWR EIR Addendum No. 3)<sup>6</sup>.

### **Previously Approved PWM/GWR Project Overview**

**Figure 2** includes a map of the previously approved PWM/GWR Project. The previously approved PWM/GWR Project components identified above include<sup>7</sup>:

#### **Source Water Diversion and Storage Sites**

These facilities include source water diversion, conveyance, and storage facilities at Blanco Drain, Reclamation Ditch, the Salinas Pump Station, Salinas Industrial Wastewater Treatment Facility (SIWTF) and associated conveyance system. The PWM/GWR project also includes diversion structures and pipelines that have not been funded or constructed, including at the western edge of Lake El Estero and at Tembladero Slough.<sup>8</sup> The approved and funded facilities under construction will enable new source waters to be diverted into the existing municipal wastewater collection system and to the RTP to supplement the existing incoming wastewater flows.

#### **Treatment Facilities at the Regional Treatment Plant**

These include the AWPf and pump station facilities at the RTP that provide treatment and production of purified recycled water. The AWPf will include a state-of-the-art treatment system that uses multiple membrane barriers to purify the water, product water stabilization to prevent pipe corrosion due to water purity, a pump station, and a brine and wastewater mixing facility. The water treated by the AWPf will meet or exceed federal and state drinking water standards, including those set forth in Titles 17 and 22. The approved PWM/GWR Project also includes modifications to the Salinas Valley Reclamation Plant to improve delivery of recycled water to agricultural users, although this component has not been funded.

#### **Product Water Conveyance**

These facilities include the Product Water Conveyance Pipeline and Blackhorse Reservoir shared by the PWM/GWR and RUWAP projects and appurtenant facilities to transport the purified recycled water from the AWPf to the Seaside Groundwater Basin for injection.

#### **Injection Well Facilities**

The injection facilities include new wells (eight in total, four in the shallow and four in the deep aquifers), back-flush facilities, pipelines, electricity/power distribution facilities, and electrical/motor control buildings.

---

<sup>6</sup> Note: the combined RUWAP-PWM conveyance system, also termed the Shared Product Water Conveyance Facilities, was also approved by MCWD in March 2016 (RUWAP Addendum No. 3).

<sup>7</sup> Source: Resolution October 2015, Monterey Regional Water Pollution Control Agency Board (now M1W) as modified by October 2017 Approvals (including Addendum No 3 to the PWM EIR and Addendum No. 3 to the RUWAP EIR).

<sup>8</sup> The Tembladero Slough diversion is no longer being pursued as part of the PWM/GWR Project due conditions imposed by the State Water Resources Control Board in water rights permits for the Blanco Drain and the Reclamation Ditch source water diversions.

### **CalAm Distribution System**

CalAm distribution facilities necessary for water delivery from the Seaside Groundwater Basin and CalAm water distribution system improvements (Monterey Pipeline and Hilby Pump Station) to deliver the extracted groundwater to CalAm customers.

As approved, the PWM/GWR Project will provide the following benefits when it is fully operational:

#### **Replenishment of the Seaside Groundwater Basin**

The PWM/GWR Project will replenish the Seaside Groundwater Basin with 3,500 AFY of purified recycled water to replace a portion of CalAm's water supply as required by state orders, including State Regional Water Resources Control Board (State Water Board) Order WR 2009-0060, as amended by Order WR 2016-0016. This will enable CalAm to reduce its diversions from the Carmel River system by up to 3,500 AFY by injecting the same amount of purified recycled water into the Seaside Groundwater Basin. The PWM/GWR Project also includes a drought reserve program that provides a total of 200 AFY (up to 1,000 AF total) of water to the Seaside Groundwater Basin.<sup>9</sup>

#### **Additional Recycled Water for Agricultural Irrigation in Northern Salinas Valley**

The approved PWM/GWR Project included diverting and using additional new source waters and improving the existing water recycling facility at the RTP (the Salinas Valley Reclamation Plant) to produce additional recycled water for use in the CSIP's agricultural irrigation system. It is anticipated that in normal and wet years, thousands of acre-feet of additional recycled water supply could be created for agricultural irrigation purposes.

#### **Existing Environmental Compliance and Permits**

The PWM/GWR Project has undergone substantial environmental review and regulatory compliance. Key environmental review documents and permitting approvals include the following:

- The certified PWM/GWR Project EIR prepared to support project approvals and meet the requirements of the Clean Water State Revolving Fund loan program that is partially funded through the U.S. Environmental Protection Agency (certified October 8, 2015; available at: [www.purewatermonterey.org](http://www.purewatermonterey.org)) and Addenda by responsible agencies, and by M1W, the lead agency. Addendum No. 1 (2016) and Addendum No. 2 (2017) to the PWM/GWR EIR were approved by the MPWMD (related to the Monterey Pipeline and Hilby Pump Station) and Addendum No. 3 to the PWM/GWR EIR was approved by the M1W in October 2017 (related to Shared Conveyance Facilities and Increased Capacity at the AWPf).

---

<sup>9</sup> The Expanded PWM/GWR Project will not change either of the two groundwater banking programs (drought reserve and operational reserve) that are part of the approved PWM/GWR Project. The drought reserve would build a water storage account of up to 1,000 acre-feet (AF) of water in the Seaside Basin during normal and wet years. The extra recharge during normal and wet years would be offset by an increase in CSIP deliveries and a corresponding decrease in Seaside Groundwater Basin injection by up to 1,000 AFY during dry years, during which CalAm will continue to pump 3,500 AFY by using some of the drought reserve account. .



- Letter of concurrence from the State Historic Preservation Office completing the NHPA Section 106 process (April 19, 2016);
- U.S. Fish and Wildlife Service Biological Opinion for compliance with Endangered Species Act (ESA) Section 7 Consultation (December 20, 2016);
- Letter of concurrence from the National Oceanic and Atmospheric Administration National Marine Fisheries Service (December 5, 2016);
- Clean Water Section 404 Authorization to Fill Waters of the U.S. from the U.S. Army Corps of Engineers for the Blanco Drain and Reclamation Ditch Diversions (Source Waters components) (January 18, 2017);
- Clean Water Section 401 Water Quality Certification from the SWRCB for the Blanco Drain and Reclamation Ditch Diversions (March 30, 2017);
- California Fish and Game Code Section 1602 Lake and Streambed Alteration Agreement for the Blanco Drain and Reclamation Ditch Diversions (June 8, 2017);
- SWRCB Water Rights Permits 21376 and 21377 for the diversion of surface waters from Blanco Drain and Reclamation Ditch (March 17, 2017);
- Clean Water State Revolving Fund (CWSRF) CEQA findings and a Notice of Determination (January 2017);
- State Lands Commission, Land Lease Approval (April 2017);
- U.S. Bureau of Reclamation, Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) Pure Water Monterey Groundwater Replenishment Project (June 20, 2017);
- National Pollutant Discharge Elimination System Permit / Waste Discharge Requirements Reissuance for the Monterey One Water Regional Wastewater Treatment Plant and Advanced Water Purification Facility Discharge to the Pacific Ocean (December 6, 2018); and
- National Oceanic and Atmospheric Administration, Monterey Bay National Marine Sanctuary, EA and FONSI for the Authorization of the National Pollutant Discharge Elimination System Permit for the Monterey One Water Regional Wastewater Treatment Plant and Advanced Water Purification Facility (April 1, 2019).

In addition, private and local agency permits and approvals (including easements, right of entry agreements, land lease/sales, and encroachment permits), have been secured for the PWM/GWR Project. Entities include: CalAm, Cities of Seaside, Marina, Salinas; Fort Ord Reuse Authority; Marina Coast Water District; Monterey Bay Air Resources Board; Monterey County Health Department; Environmental Health Division; Monterey County Resource Management Agency; Monterey County Water Resources Agency; Monterey Peninsula Water Management

District;<sup>10</sup> Monterey Peninsula Airport District/Airport Land Use Commission; Monterey Regional Waste Management District; Pacific Gas and Electric; Seaside Groundwater Basin Watermaster; and local landowners.

## **Expanded PWM/GWR Project Description**

Environmental documentation previously completed divided the PWM/GWR Project into the following components, as described in this document: Source Water Diversion and Storage Sites, Treatment Facilities at the Regional Treatment Plant, Product Water Conveyance, Injection Well Facilities, and CalAm Distribution System. To increase the amount of water available to CalAm under the Expanded PWM/GWR Project, several changes to these PWM/GWR Project Components would be required. See **Figure 3**. The following describes the proposed changes under this Expanded PWM/GWR Project:

### **Changes to Source Water Diversion and Storage Sites**

No new source water diversion and storage sites are necessary to achieve the Expanded PWM/GWR Project's recycled water yield objective of an additional 2,250 AFY of replacement supplies. The Expanded PWM/GWR Project is designed to utilize existing M1W contractual rights to source waters and wastewaters.

However, one or more future urban storm water to sanitary sewer diversions (such as planned sanitary sewer diversion projects in Seaside and Monterey) may provide additional source water for the Expanded PWM/GWR Project. These additional source waters would not increase the Expanded PWM/GWR Project yield above 2,250 AFY. Rather, these additional source waters, if they come to fruition, would provide greater supply reliability for the Expanded PWM/GWR Project.

- The City of Seaside's proposed 90-inch Storm Water Diversion and Trash Capture Project would involve the installation and operation of a diversion structure on the 90-inch storm drain to divert dry weather and wet weather flows to hydrodynamic separators designed to remove sediment and debris from the water prior to diversion to the sanitary sewer. .
- Additional urban storm water to sanitary sewer diversion projects have been described in the Monterey Peninsula Water Recovery Study (see Appendix D of <http://montereysea.org/stormwater-resource-plan/>). The diversion project (the "diversion to sanitary sewer" portion) that was the top-ranked project from that study would be located near Hartnell Gulch.

### **Changes to Treatment Facilities at the Regional Treatment Plant**

*Modifications to the Advanced Water Purification Facility.* The design and physical features of the AWPf currently under construction (the PWM/GWR Project as approved) allow operation of the AWPf at a peak capacity of 5.0 mgd. Expanding the AWPf to produce up to 7.6 mgd will require installation of additional treatment and pumping equipment, chemical storage, pipelines

---

<sup>10</sup> MPWMD approved the Hilby Pump Station and changes to the Monterey Pipeline through the required Water Distribution System permit, using the PWM/GWR EIR and Addenda No. 1 and 2.

and facility appurtenances within the 3.5-acre existing building area. The AWPf would be designed to produce a seasonal peak of 7.6 mgd.

### **Changes to Product Water Conveyance**

The Expanded PWM/GWR Project would require an additional Product Water Conveyance pipeline and, potentially, an additional booster pump station. To serve new injection well sites, the Expanded PWM/GWR Project would require the addition of up to 2 miles of 16-inch diameter pipeline and appurtenances. The pipeline would be located within existing unpaved and paved roads from the Marina Coast Water District's Blackhorse Reservoir to a new injection well site located in the area on the south side of Eucalyptus Road near the eastern boundary of the City of Seaside. See **Figure 4** for the location of this new purified recycled water pipeline that would carry water from the Blackhorse Reserve to the new eastern injection well facilities area.

In addition, a new booster pump station may be required to accommodate the additional water produced by the AWPf. Due to friction losses in the conveyance pipeline, the conveyance system may not have enough energy to enable adequate injection of purified recycled water at certain well sites (for example those at the highest elevations) without additional pumping. Therefore, a small booster pump station may be required to boost the flows to one or more potential injection well sites within the original injection well facilities area. If needed, this pump station would be within the boundaries of the previously approved injection well facilities construction areas.

### **Changes to Injection Well Facilities**

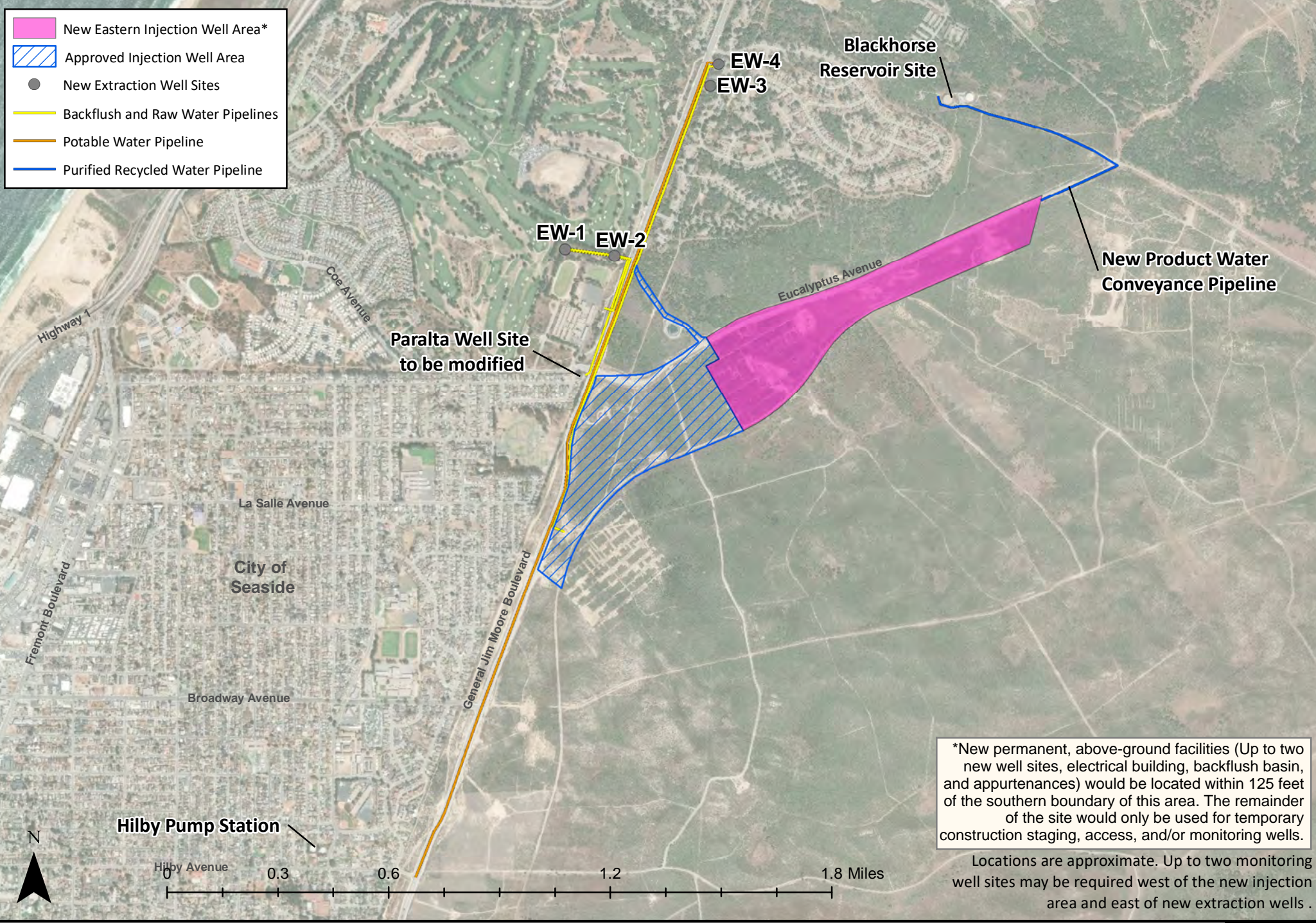
*Modifications to Injection Well Facilities.* The approved PWM/GWR Project includes subsurface groundwater recharge facilities, including shallow (or vadose zone) and deep injection wells located within the Seaside Groundwater Basin in the area shown on **Figure 2**, the Approved Injection Well Facilities Area. The existing vadose zone wells inject water into the unsaturated soils overlying the uppermost aquifer (the unconfined Paso Robles Aquifer), and the deeper wells inject into the confined Santa Margarita Aquifer. Final project design and project permitting have resulted in minor modifications to the layout of the Injection Well Facilities site and have provided information to the team to refine the locations of the remaining two (2) deep wells originally planned. The PWM/GWR Project EIR evaluated four clusters of injection well facilities, each with one deep injection well and one shallow injection well. For an Expanded PWM/GWR Project, M1W would construct the remaining two (2) of the four (4) planned deep injection wells. However, for the Expanded PWM/GWR Project one of those planned deep injection well sites would be relocated farther to the northeast to the new Eastern Injection Well Area, and one additional new deep injection well would be constructed in the new Eastern Injection Well Area. No new vadose zone wells are proposed compared to the approved PWM/GWR Project that included four (4) new vadose zone wells. With the expansion, the total number of injection wells (8) will be no more than with the Approved PWM/GWR Project.<sup>11</sup> Each well would be equipped with associated backwash pumps and appurtenances. Under the approved PWM/GWR Project,

---

<sup>11</sup> The Approved PWM/GWR Project included analysis of eight (8) total injection wells: four (4) shallow and four (4) deep. The Expanded PWM/GWR Project may require eight (8) total injection wells with up to five (5) deep injection wells and up to three (3) shallow injection wells.



monitoring wells were proposed to be installed between the new deep injection well site and nearest downgradient extraction well. Although the locations of these monitoring wells are not shown on **Figure 3** and **Figure 4**, they would be located in the area between General Jim Moore Boulevard and the eastern injection wellfield area shown. This location would be different from the location for the monitoring wells under the approved PWM/GWR Project. A new electrical building and percolation basin for backwash water disposal (percolation into the vadose zone) would be included at a central location within the eastern Injection Well Facilities Area. The Expanded PWM/GWR Project would potentially include increasing the capacity of the approved percolation basin.



\*New permanent, above-ground facilities (Up to two new well sites, electrical building, backflush basin, and appurtenances) would be located within 125 feet of the southern boundary of this area. The remainder of the site would only be used for temporary construction staging, access, and/or monitoring wells.

Locations are approximate. Up to two monitoring well sites may be required west of the new injection area and east of new extraction wells.

Document Path: D:\GIS\GIS\_Progects\2013-13 GW\Final Product\Expanded Capacity\_Program\Injection\_Estimate\07\_2019\13-13 GW\Map



## **Changes to CalAm Distribution System**

*Extraction Wells.* For CalAm to utilize the additional purified recycled water produced by the Expanded PWM/GWR Project, additional potable water extraction wells, wellhead treatment and pipelines would be required.<sup>12</sup> See **Figure 4** for proposed locations of the new CalAm facilities. To reliably meet the proposed yield of the Expanded PWM/GWR Project, CalAm would construct and operate two (2) new extraction wells, plus two additional extraction wells to provide system redundancy/back-up. Collectively these new extraction wells are identified as Extraction Wells 1 through 4. Extraction Wells 1 and 2 would be located just north of Seaside Middle School. The Blackhorse Golf Course is located to the north and west of Extraction Well sites 1 and 2. Extraction Wells 3 and 4 would be located just to the east of General Jim Moore Boulevard, near the southeast corner of the intersection of General Jim Moore Boulevard and Ardennes Circle on U.S. Army-owned property in the Fitch Park neighborhood of the Ord Military Community. Extraction Wells 3 and 4 would be designed consistent with the Aquifer Storage and Recover (ASR) Wells 5 and 6 as analyzed in previous environmental documentation prepared for the MPWSP; however, these wells would only include the capability to extract and treat groundwater, and would not include any above-ground facilities needed to enable injection. Extraction Wells 3 and 4 would be constructed to provide additional system extraction redundancy only. Each extraction well would include a well pump and motor, chlorination dosing equipment, and associated electrical equipment, which would be contained on an approximately 100 square foot concrete pad. CalAm may elect to install emergency generators at one or more extraction well sites, depending upon their need for system reliability. No new extraction wells were proposed or approved as part of the PWM/GWR Project, thus these extraction wells were not included in the construction areas of the PWM/GWR Project approved on October 8, 2015.

*Potable and Raw Water Pipelines.* In addition, for the Expanded PWM/GWR Project CalAm would construct and operate new potable and raw water pipelines to convey the water from the new extraction wells to treatment facilities (including new wellhead chlorination system at the existing CalAm Paralta Well) and to the existing CalAm distribution system. An up to 36-inch pipeline that would be up to approximately 2 ½ miles in length would be installed in the General Jim Moore Boulevard right of way. The pipeline would begin at Extraction Well 4 (the northern most extraction well) and connect to the existing ASR pipe network at ASR Wells 1 and 2 (Santa Margarita site). From that point, water would be distributed to CalAm customers throughout the region. This new potable water pipeline was not included in the approved PWM/GWR Project.

## **Potential Environmental Impacts**

M1W, as the CEQA Lead Agency, proposes to prepare a focused Supplemental EIR to support the approval of changes to the PWM/GWR Project. The Supplemental EIR on the Expanded PWM/GWR Project will evaluate potential environmental effects associated with construction, operation, and maintenance activities. When M1W decides whether to approve the changes to the project, the M1W Board must consider the previous EIR as revised by the Supplemental EIR.

---

<sup>12</sup> The approved PWM/GWR Project assumed extraction would occur using existing potable wells, disinfection treatment processes, and distribution systems (after the injected water meets regulatory-required residence time with groundwater in the Seaside Basin).



Therefore, the M1W Board will ultimately consider the Supplemental EIR in combination with the previous PWM/GWR EIR, which was certified in October 2015, and the adopted Addenda (refer to Approved PWM/GWR Project Facilities and CEQA Documentation, above).

The Supplemental EIR is intended to serve as a supplement to the previously adopted 2015 Final EIR, impacts and conditions presented in the previous EIR will serve as the primary base of comparison for the analysis. Elements of the prior analysis that are unchanged will not be repeated in the Supplemental EIR.

The Supplemental EIR for the Expanded PWM/GWR Project will assess the following issues of potential environmental effects focusing only on the revised project components as discussed above:

### ***Aesthetics Resources***

Expanded project facilities would predominantly be underground or located on existing water and wastewater facility sites. Those facilities that are not located on existing water and wastewater facility sites would be designed to visually blend into the environment through use of vegetative screening and/or appropriate materials and colors. The Supplemental EIR will evaluate visual/aesthetic impacts related to the Expanded PWM/GWR Project's limited above-ground facilities, including visual character, scenic vistas, and new sources of light and glare.

### ***Agricultural and Forest Resources***

There are no agricultural for forest resources within the Expanded PWM/GWR Project sites where components would be constructed. The evaluation of agricultural and forest resources as addressed in the 2015 Final EIR will not be updated in the Supplemental EIR.

### ***Air Quality and Greenhouse Gas Emissions***

The project site is located within the Monterey Bay Air Resources District (formerly the Monterey Bay Unified Air Pollution Control District). Construction of the expanded facilities would generate emissions from construction equipment exhaust, earth movement, construction workers' commutes, and material hauling. Operation of pump stations, wells, and treatment facilities would require use of electricity, which would generate greenhouse gas emissions. The Supplemental EIR will evaluate construction- and operation-related emissions of criteria air pollutants and greenhouse gas emissions from these expanded facilities and expanded operations.

### ***Biological Resources***

The Supplemental EIR will evaluate potential impacts of the expanded project facilities on terrestrial special-status animal and plant species, sensitive habitats, mature native trees, and migratory birds that may occur in the Expanded PWM/GWR Project area. The Supplemental EIR will also address potential impacts to marine resources from the expanded project and compliance with the California Ocean Plan water quality objectives.

### ***Cultural Resources***

Construction of new expanded facilities both above and below-ground could encounter previously unknown archaeological or paleontological resources during ground disturbance and excavation. The Supplemental EIR will assess if there are any potential effects of the Expanded PWM/GWR Project on cultural resources, including archaeological, paleontological, and Native American resources, and Tribal cultural resources.

### ***Geology, Soils, and Seismicity***

Construction and operation of the Expanded PWM/GWR Project will occur in a seismically active region. The Supplemental EIR will focus on new or expanded areas of ground-disturbing activities, soils and seismic hazards, and potential for soil erosion from the expanded facilities.

### ***Hazards and Hazardous Materials***

Construction of the Expanded PWM/GWR Project facilities would require excavation of the existing ground surface, which could uncover contaminated soils or hazardous substances that pose a substantial hazard to human health or the environment. The Supplemental EIR will focus evaluation on the potential for hazardous materials to be encountered during construction of the expanded facilities. The analysis will also consider the proper handling, storage, and use of hazardous chemicals that may be used during construction and operation of the expanded facilities.

### ***Hydrology and Water Quality***

Through the use of groundwater modeling and hydrogeologic analyses, the Supplemental EIR will evaluate changes in local groundwater quality, storage, and levels within the groundwater basins as a whole and their subbasins, as appropriate. The Supplemental EIR will describe the recharge, storage, and recovery capacities of the Seaside Groundwater Basin and describe potential impacts of recharge and extraction activities at the Expanded PWM/GWR Project locations. Potential effects on the seawater/freshwater interface (i.e., seawater intrusion) will also be evaluated. The Expanded PWM/GWR Project would be designed to comply with California Department of Public Health and Regional Water Quality Control Board standards and requirements to protect public health and water quality.

Construction and operation of the Expanded PWM/GWR Project could affect surface water quality and hydrologic systems/processes in the construction areas. Potential impacts to be evaluated include alteration of drainage patterns and increase in stormwater flows due to increase in the amount of impervious surfaces, and degradation of surface water quality as a result of erosion and sedimentation, hazardous materials release during construction, and construction dewatering discharges. The Expanded PWM/GWR Project would be designed to comply with standard construction and operational requirements, the California Ocean Plan, and permits under the National Pollutant Discharge Elimination System and Waste Discharge Requirements.

### ***Land Use Planning***

Implementation of the Expanded PWM/GWR Project includes construction and operation of new facilities and water supply infrastructure within the same planning jurisdictions as evaluated in the PWM/GWR EIR. The Supplemental EIR will focus on the proposed expanded facilities and determinations of consistency with established plans, policies, and regulations, as well as compatibility with the existing and future land use patterns in the area, including adjacent land uses. Because most conveyance facilities will be underground, and because the proposed treatment facilities would be located at the existing AWPf site at the M1W Regional Treatment Plant, significant effects on land use patterns are not anticipated.

### ***Mineral Resources***

The PWM/GWR EIR addressed local mineral resources; the evaluation of these resources as addressed in the 2015 Final EIR will not need to be updated in the Supplemental EIR.

### ***Noise and Vibration***

Implementation of the Expanded PWM/GWR Project would require construction and operation of expanded facilities that would potentially generate additional noise and vibration. The Supplemental EIR will focus on the potential noise sources and evaluate the proximity of sensitive receptors to the Expanded PWM/GWR Project components to assess whether the facilities would comply with local noise policies and ordinances.

### ***Population and Housing***

Implementation of the Expanded PWM/GWR Project would enhance the reliability of the water supply within the Monterey Peninsula area. The project would provide replacement water rather than new water to serve growth. The Supplemental EIR will identify current population and employment projections and identify local planning jurisdictions with the authority to approve growth and mitigate secondary effects of growth.

### ***Public Services and Recreation***

Implementation of the Expanded PWM/GWR Project would be unlikely to affect demand for public services, or to require new or expanded facilities for public service providers. The 2015 EIR previously assessed the potential for impacts on police and fire protection services, schools, parks and recreational facilities. This evaluation will not need to be updated in the Supplemental EIR.

### ***Water Supply and Wastewater Systems***

Implementation of the Expanded PWM/GWR Project would enhance the reliability of the water supply within the Monterey Peninsula area. The Supplemental EIR will address the Expanded PWM/GWR Project's effect on water supplies. Implementation of the Expanded PWM/GWR Project is not expected to have a new adverse impact related to wastewater treatment facilities.

### ***Transportation and Traffic***

The Supplemental EIR will generally describe the types of construction activities that would be generated by the Expanded PWM/GWR Project focusing on temporary increases in traffic volumes along local and regional roadways from construction of expanded facilities.

### ***Utilities, Service Systems, and Energy***

Implementation of the Expanded PWM/GWR Project would result in increased use of pump stations, extraction wells, conveyance and treatment facilities, which would increase the amount of electricity use required locally to achieve regional water supply goals. The Supplemental EIR will evaluate energy consumption from the expanded facilities and compare the proposed energy use with energy demands in the 2015 EIR.

### ***Cumulative and Growth Inducing Impacts***

The Supplemental EIR also will evaluate potential growth-inducing impacts that could result from implementation of the Expanded PWM/GWR Project. The Supplemental EIR will address whether the Expanded PWM/GWR Project would have impacts that are individually limited, but cumulatively considerable when combined with the impacts of other past, present and reasonably foreseeable future projects (i.e., cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).

## **Notice of Preparation of a Supplemental Environmental Impact Report and Public Scoping Meeting Notice**

**To:** California Office of Planning and Research; Responsible and Trustee Agencies; County Clerks; and Other Interested Parties

**Subject:** Notice of Preparation of a Supplemental Environmental Impact Report and Public Scoping Meeting Notice

**Project:** Expanded Pure Water Monterey Groundwater Replenishment Project

**Lead Agency:** Monterey One Water

**Date:** May 15, 2019

This Notice of Preparation (NOP) has been prepared to notify agencies and interested parties that Monterey One Water (M1W), formerly Monterey Regional Water Pollution Control Agency, as the Lead Agency is beginning preparation of a Supplemental Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA) for the proposed expansion of the Pure Water Monterey Groundwater Replenishment Project (Expanded PWM/GWR Project). M1W, in conjunction with the Monterey Peninsula Water Management District (MPWMD), is proposing an expansion of the capacity of the PWM/GWR Project which is currently under construction. The PWM/GWR Project's Advanced Water Purification Facility would be expanded from the current 5 million gallons per day (mgd) plant to up to a 7.6 mgd maximum capacity plant to enable an increase in groundwater replenishment from 4 mgd to up to 7.6 mgd. The proposed Expanded PWM/GWR Project also includes associated conveyance, injection and extraction facilities, as described below.

The proposed Expanded PWM/GWR Project would reduce discharges of secondary effluent to Monterey Bay and would replenish the Seaside Groundwater Basin with approximately 2,250 AFY of additional purified recycled water. Combined with the existing PWM/GWR Project yield this expansion would result in a total water supply yield of approximately 5,750 AFY to replace existing water supplies for California American Water Company's (CalAm) Monterey District service area and enable CalAm to comply with the State Board's Cease and Desist Order (Orders 95-10, 2016-0016) as amended. At this time, the Expanded PWM/GWR Project is considered a "back-up plan" to the Monterey Peninsula Water Supply Project (MPWSP), CalAm's planned 6.4 mgd desalination project. The Expanded PWM/GWR Project would be implemented in the event that the MPWSP encounters obstacles that prevent timely, feasible implementation.

This Notice of Preparation (NOP) includes a brief description of the Expanded PWM/GWR Project and the environmental topics to be addressed in the Supplemental EIR. The proposed expansion would constitute a change to the previously approved PWM/GWR Project. Therefore, the Supplemental EIR will evaluate whether any new or substantially more severe impacts on the environment would result from the project changes, compared to the environmental impacts



disclosed in the previously certified PWM/GWR Project EIR and Addenda. The Supplemental EIR also will incorporate the applicable mitigation measures that were identified in the previously certified EIR and Addenda.

M1W is soliciting comments from all interested persons, responsible and trustee agencies and organizations as to the scope and content of the Supplemental EIR and the environmental information to be analyzed in connection with the proposed Expanded PWR/GWR Project. The Final EIR for the PWM/GWR Project was certified in October 2015. Addenda to that EIR were approved in June 2016 (Addendum No. 1), February 2017 (Addendum No. 2), and October 2017 (Addendum No. 3). The Final EIR and Addenda to the EIR can be found at the following link <http://purewatermonterey.org/reports-docs/>.

In accordance with CEQA, agencies and the public are requested to review the description of the Expanded PWM/GWR Project provided in this NOP and provide comments on environmental issues related to the commenting agencies' statutory responsibilities. The Supplemental EIR will be used by M1W, MPWMD and other Responsible Agencies when considering approval of the Expanded PWM/GWR Project.

**Location:** The Expanded PWM/GWR Project would be located within northern Monterey County and would include facilities located within the City of Seaside and portions of the unincorporated Monterey County, as shown in Figures 2 and 3. The Expanded PWM/GWR Project would increase the amount of purified recycled water available to replenish the Seaside Groundwater Basin, replacing existing water supplies for CalAm's Monterey District service area and enabling CalAm to comply with the State Board's Cease and Desist Order as amended. The NOP is available at <http://www.purewatermonterey.org> and at M1W's offices, located at 5 Harris Court, Building D Monterey, CA 93940.

**Comments on the NOP must be received by M1W no later than 30 days after publication of this NOP.** The NOP has been made available for public review on May 15, 2019.

Comments on this NOP must be received no later than **June 14, 2019** at 5 PM. Please send your comments, including a return address, contact name, and email to this address:

Mail: Monterey One Water                      Email: [purewatermontereyinfo@my1water.org](mailto:purewatermontereyinfo@my1water.org)  
Attn: Rachel Gaudoin  
5 Harris Court, Building D, Monterey, CA 93940

**Public Scoping Meeting:** A public meeting will be held to receive public comments and suggestions on the scope of the Supplemental EIR. The scoping meeting will be open to the public on the following date in the following location:

Wednesday, June 5, 2019 at 5:30 p.m.  
Oldemeyer Center: Blackhorse Meeting Room  
986 Hilby Avenue, Seaside, CA 93955

# Expanded Pure Water Monterey Groundwater Replenishment Project

## Notice of Preparation

### Introduction and Background

Monterey One Water (M1W, formerly the Monterey Regional Water Pollution Control Agency or MRWPCA), in partnership with the Monterey Peninsula Water Management District (MPWMD), is proposing an expanded Pure Water Monterey Groundwater Replenishment Project (Expanded PWM/GWR Project) to create a reliable source of water supply to replace existing water supply sources for the Monterey Peninsula in northern Monterey County. **Figure 1** below shows M1W's existing infrastructure and service area. The Expanded PWM/GWR Project would increase the amount of purified recycled water produced by the PWM/GWR Project that is currently under construction.

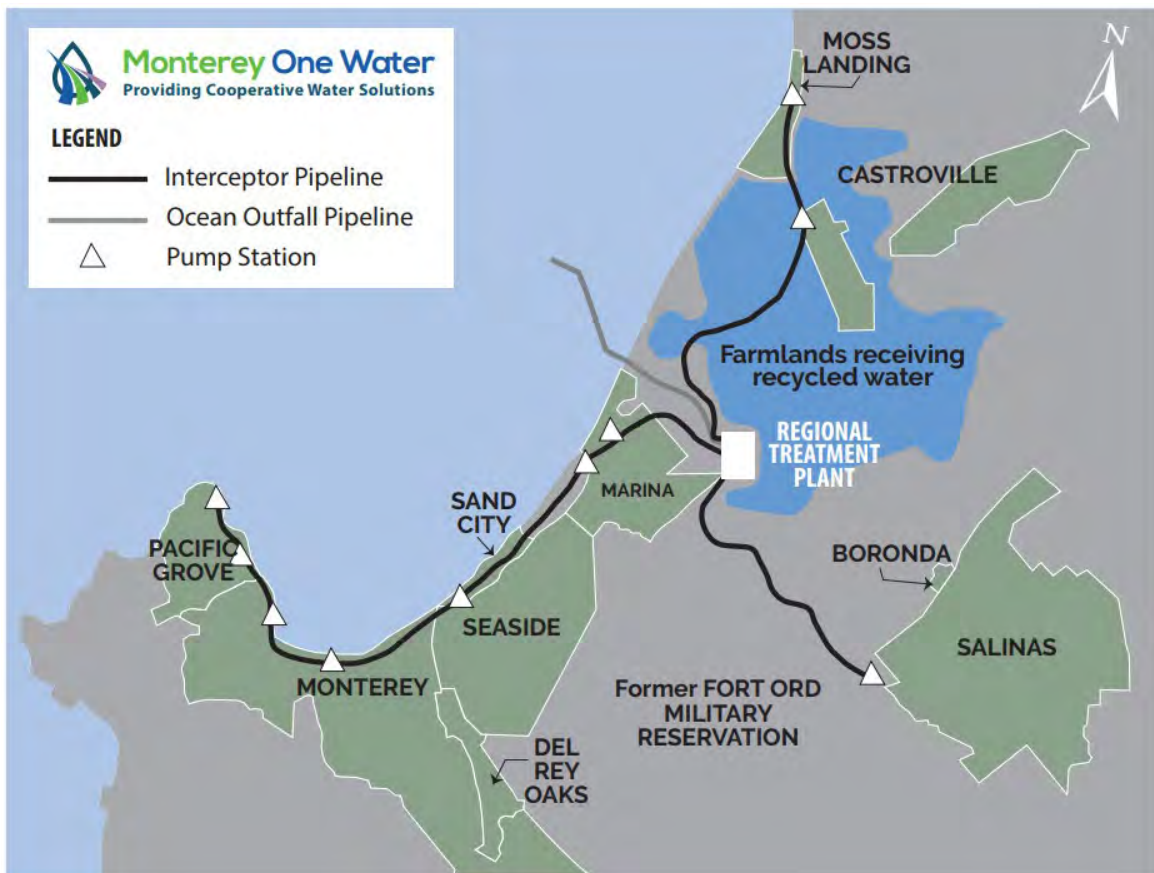


Figure 1. M1W Service Area

As approved, the PWM/GWR Project will create a reliable source of water supply by taking highly-treated water from the Advanced Water Purification Facility (AWPF)<sup>1</sup> and recharging the Seaside Groundwater Basin with the treated water using a series of shallow and deep injection wells. Once injected into the Seaside Groundwater Basin, treated water will mix with the groundwater present in the aquifers and be stored for future extraction and use. The primary purpose of the approved PWM/GWR Project is to provide 3,500 acre-feet per year (AFY) of high quality replacement water to California American Water Company (CalAm) for delivery to its customers in the Monterey District service area; thereby enabling CalAm to reduce its diversions from the Carmel River system by this same amount<sup>2</sup>. CalAm is under a state order to secure replacement water supplies by December 2021.<sup>3</sup> (Please refer to discussion below for a full description of the approved PWM/GWR Project). **Figure 2** shows the approved PWM/GWR Project facility locations.

The Expanded PWM/GWR Project would increase the AWPF peak capacity from the current 5 million gallons per day (mgd) to 7.6 mgd and increase recharge of the Seaside Groundwater Basin with high quality purified water by an additional 2,250 AFY (for a total PWM/GWR Project yield of 5,750 AFY). At this time, the Expanded PWM/GWR Project is considered a “back-up plan” to the MPWSP, CalAm’s planned 6.4 mgd desalination project. The Expanded PWM/GWR Project would be implemented in the event that the MPWSP encounters obstacles that prevent its timely, feasible implementation. The Expanded PWM/GWR Project would include the following new or modified M1W facilities:

- improvements to the existing PWM/GWR Project AWPF (adding equipment, pipelines, and storage within the existing plant site);
- up to 2 miles of new purified water conveyance pipelines;
- one new injection well at a new eastern wellfield area and associated infrastructure;
- relocation of one approved injection well site and associated infrastructure to the eastern wellfield area; and
- relocation of previously approved monitoring well sites to the area between a new eastern injection well area and extraction wells along General Jim Moore Boulevard.

---

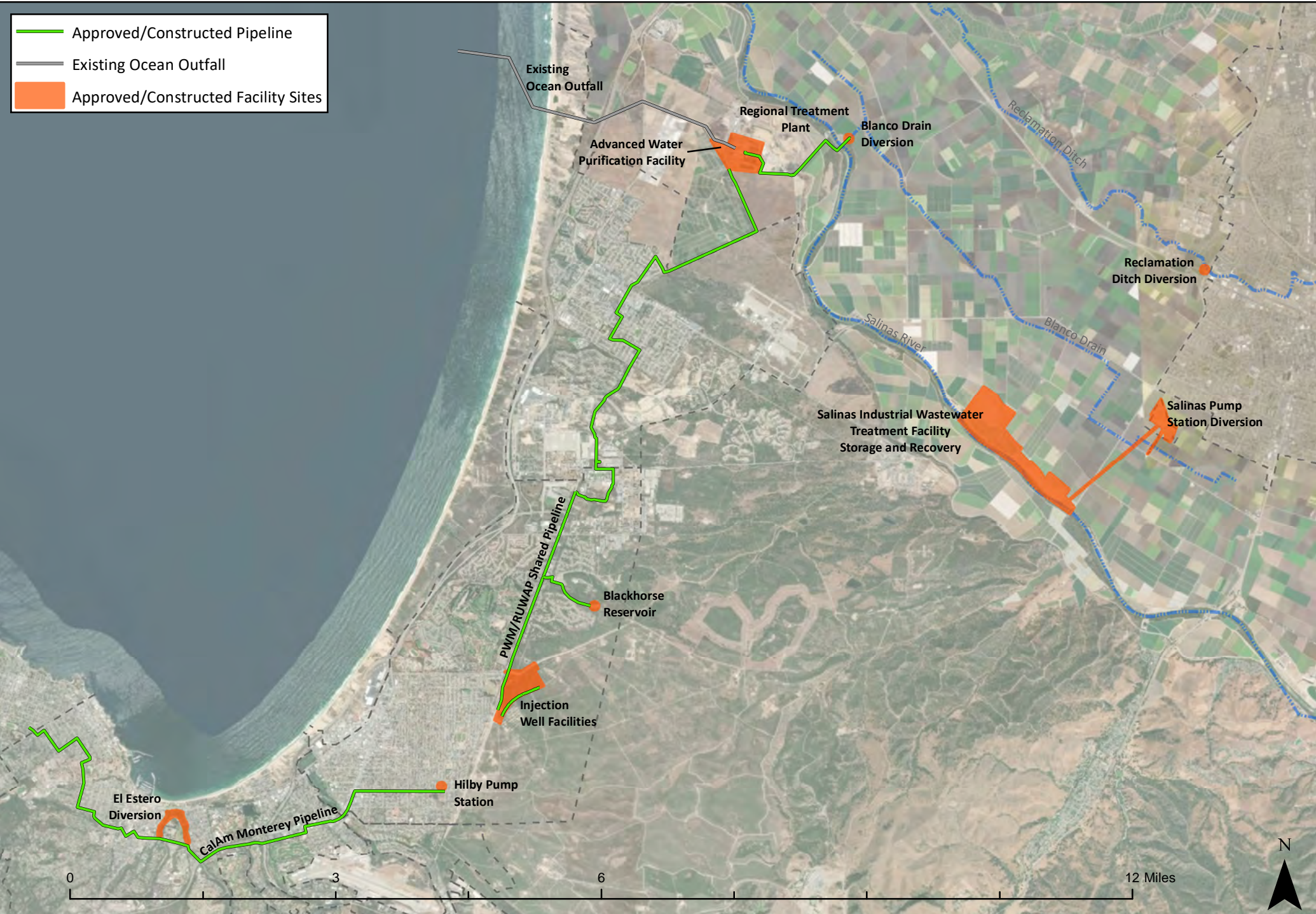
<sup>1</sup> Also referred to as the Advanced Water Treatment Facility (AWTF).

<sup>2</sup> The approved PWM/GWR Project also includes a drought reserve component to support crop irrigation during dry years. Under this component, an extra 200 AFY of advanced treated water will be injected in the Seaside Groundwater Basin during normal and wet years, up to a total of 1,000 AF, to create a “banked reserve.” During drought years, M1W will reduce the amount of water injected into the Seaside Groundwater Basin in order to increase production of recycled water for crop irrigation. CalAm will be able to extract the banked water in the Seaside Groundwater Basin to make up the difference to its supplies, such that its extractions and deliveries will not fall below 3,500 AFY.

<sup>3</sup> The State Water Resources Control Board’s Cease and Desist Order 95-10 required the reduction of CalAm pumping from the Carmel River; Order 2016-16 extended the time period for withdrawals above legal limits from the Carmel River through 2021.



- Approved/Constructed Pipeline
- Existing Ocean Outfall
- Approved/Constructed Facility Sites



## Approved Pure Water Monterey Project Overview Map

In order for CalAm to pump additional groundwater injected by the Expanded PWM/GWR Project into the Seaside Groundwater Basin and deliver it to meet its system demands, the following CalAm potable water system improvements would be required:

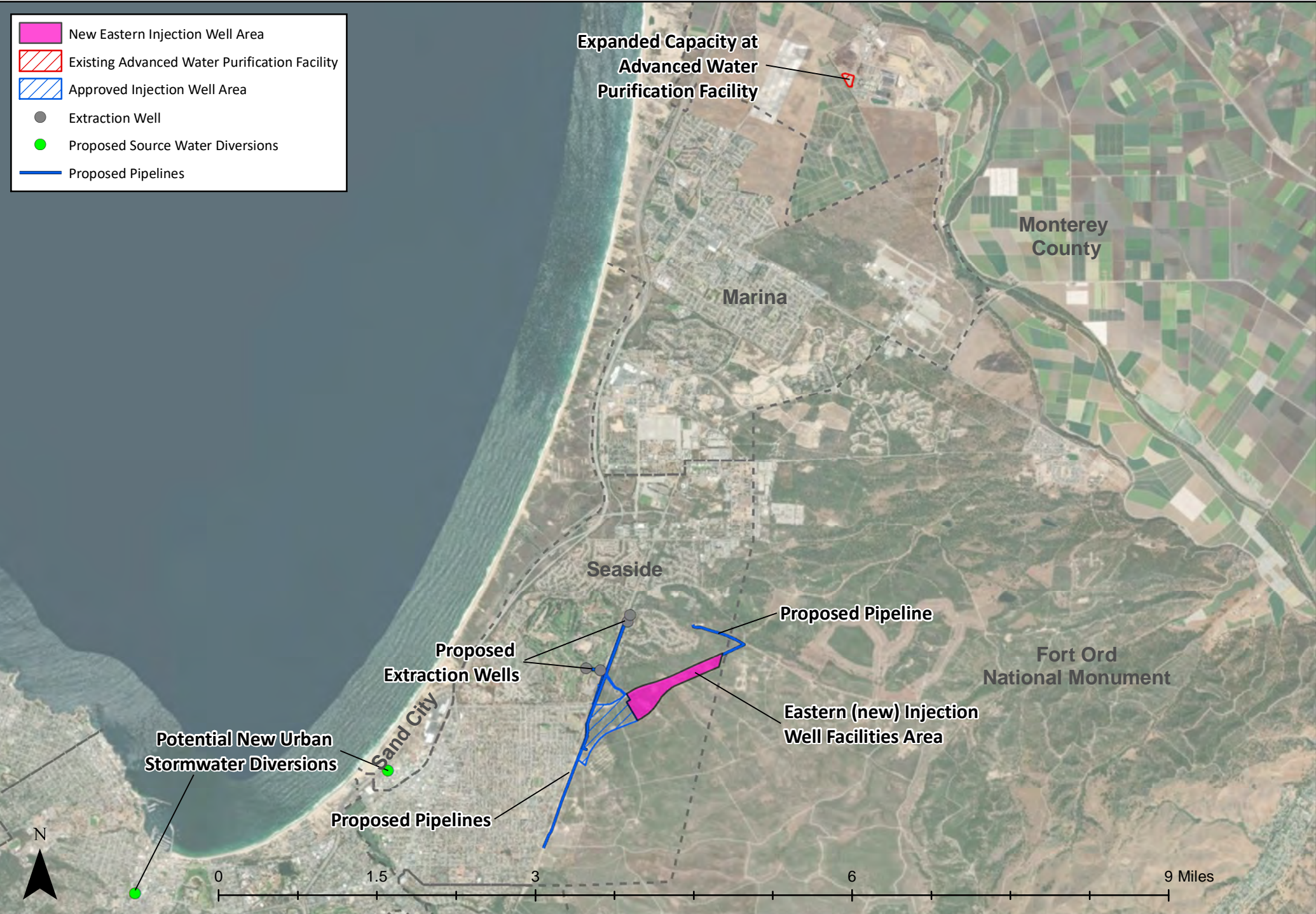
- two (2) new extraction wells, plus two (2) new extraction wells for system redundancy and associated infrastructure;
- wellhead disinfection (chlorination) treatment systems at the existing Paralta Well and two new extraction wells; and
- potable and raw water pipelines along General Jim Moore Boulevard and at the Seaside Middle School site.

In addition, one or more future urban storm water to sanitary sewer diversions (such as planned sanitary sewer diversion projects in Seaside and Monterey) may provide additional source water for the Expanded PWM/GWR Project. The locations of the above-described facilities are shown on **Figure 3**. These additional source waters are not necessary to achieve the Expanded PWM/GWR Project's recycled water yield objective of an additional 2,250 AFY of replacement supplies, nor would these additional source waters increase the Expanded PWM/GWR Project yield above 2,250 AFY. Rather, these additional source waters, if they come to fruition, would provide greater supply reliability for the Expanded PWM/GWR Project.

### **Monterey One Water**

M1W was established in 1979 under a Joint Powers Authority agreement between the City of Monterey, the City of Pacific Grove and the Seaside County Sanitation District. M1W currently operates the regional wastewater treatment plant, including a water recycling facility (collectively, known as the Regional Treatment Plant or RTP), a non-potable water distribution system known as the Castroville Seawater Intrusion Project (CSIP), sewage collection pipelines, and wastewater pump stations. M1W's RTP is located two miles north of the City of Marina, on the south side of the Salinas River, and has a permitted capacity to treat 29.6 mgd of wastewater effluent. At the RTP, water is treated to meet Title 22 California Code of Regulations (CCR) Standards (tertiary filtration and disinfection) for unrestricted agricultural irrigation use, and the remainder is treated to meet secondary effluent water quality standards and the California Ocean Plan in M1W's National Pollutant Discharge Elimination System (NPDES) permit for ocean discharge. Commencing in 2019 with the startup and operation of the PWM/GWR Project, a portion of secondary effluent flows will be treated to Title 17 and Title 22 CCR at the AWPf for groundwater replenishment of the Seaside Groundwater Basin (Please refer to the below discussion for more detail on the PWM/GWR Project under construction).





- New Eastern Injection Well Area
- Existing Advanced Water Purification Facility
- Approved Injection Well Area
- Extraction Well
- Proposed Source Water Diversions
- Proposed Pipelines

## Expanded Pure Water Monterey Project Overview Map

Document Path: G:\GIS\GIS\_Projects\2013\_13\_01\WP\Final\_Products\Expanded\_Capacity\_Project\COverall\_Expanded\_Capacity\_Project\_Map\_05102019.mxd

## **Seaside Groundwater Basin**

The Seaside Groundwater Basin underlies an approximately 19- square-mile area underlying the Cities of Seaside, Sand City, and Del Rey Oaks, California State University Monterey Bay to the north, and open space overlying the former Fort Ord from the City of Seaside Boundary east to approximately Laguna Seca raceway, adjacent to Monterey Bay. A steep decline in groundwater elevation since 1995 in the northern coastal portion of the basin, where most of the groundwater production occurs, has coincided with increased extraction in that area after the State Water Resources Control Board required CalAm to reduce its Carmel River diversions, and instead maximize its pumping in the Seaside Groundwater Basin. Historical and persistent low groundwater elevations caused by pumping have led to concerns that seawater intrusion may threaten the Seaside Groundwater Basin's groundwater resources. 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: CalAm, City of Seaside, Sand City, City of Monterey, City of Del Rey Oaks, MPWMD 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 does not appear to be occurring at present, current water levels are lower than those required to protect against seawater intrusion. Water levels were found to be below sea level in both the Paso Robles (the shallower aquifer) and the Santa Margarita aquifers of the Seaside Groundwater Basin in 2012; therefore, it is recognized that recharge into both aquifers would be beneficial for protection against seawater intrusion.

## **State Orders to Reduce Carmel River Diversions**

The 255-square-mile Carmel River Basin is bounded by the Santa Lucia Mountains to the south and the Sierra del Salinas to the north. The Carmel Valley aquifer, which underlies the alluvial portion of the Carmel River downstream of San Clemente Dam, is about six square-miles and is approximately 16 miles long. In the summer and fall, the alluvial aquifer is drawn down by CalAm and private pumpers. Historically, this combined pumping has resulted in dewatering of the lower six miles of the river for several months in most years and up to nine miles in dry and critically dry years.

In 1995, the State Water Resources Control Board issued Order No. WR 95-10, which found that CalAm was diverting more water from the Carmel River Basin than it was legally entitled to divert. The State Water Resources Control Board ordered CalAm, instead, to maximize diversions (to the extent feasible) from the Seaside Groundwater Basin and endeavor to secure a legal replacement supply. In addition, a subsequent Cease and Desist Order (SWRCB Order No. 2009-0060) issued in 2009 required CalAm to secure replacement water supplies for its Monterey District service area and reduce its Carmel River diversions to 3,376 AFY by the 2016-17 timeframe. In July 2016, the State Water Resources Control Board issued Order 2016-0016, amending the Cease and Desist Order by extending the time period for unauthorized withdrawals from the Carmel River through December 31, 2021.

CalAm, working with local agencies, has proposed construction and operation of a CalAm owned and operated desalination project (known as the Monterey Peninsula Water Supply Project or MPWSP)<sup>4</sup> to provide a part of the replacement water needed to comply with the Cease and Desist Order as amended and the Seaside Groundwater Basin Adjudication, in conjunction with the PWM/GWR Project. The California Public Utilities Commission, as the CEQA lead agency for the MPWSP, published the Final EIR/EIS in March 2018, and approved the MPWSP in September 2018.

## **Approved PWM/GWR Project Facilities and CEQA Documentation**

### **Previously Approved Pure Water Monterey Groundwater Replenishment Project**

On October 8, 2015, the Board of Directors of M1W approved the PWM/GWR Project as modified by the Alternative Monterey Pipeline and the Regional Urban Water Augmentation Project<sup>5</sup> (RUWAP) alignment for the product water conveyance system and certified the Final EIR (PWM/GWR EIR) (State Clearinghouse No. 2013051094). The stated primary objective of the PWM/GWR Project was to replenish the Seaside Groundwater Basin with 3,500 AFY of purified recycled water to replace a portion of CalAm's water supply as required by State Water Resources Control Board orders. The originally approved PWM/GWR Project included a 4 mgd capacity AWPf for treatment and production of purified recycled water that will be conveyed for injection into the Seaside Groundwater Basin using a series of shallow and deep injection wells. The injected water will then mix with the existing groundwater and be stored for urban use by CalAm, thus enabling a reduction in Carmel River system diversions by the same amount. CalAm will recover the groundwater at existing wells (indirect potable reuse). PWM/GWR Project product water conveyance facilities include ten miles of pipeline from the AWPf to injection wells in the Seaside Groundwater Basin.

### **Previously Approved Pure Water Monterey Groundwater Replenishment Project Expansion**

On October 30, 2017, the Board of Directors of M1W approved modifications to the PWM/GWR Project to increase the operational capacity (peak or maximum product water flowrate) of the approved AWPf from 4.0 mgd to 5.0 mgd. This expanded capacity is achieved by using redundancies in the AWPf design and the purpose of the expansion is to enable delivery of 600 AFY of purified recycled water to Marina Coast Water District (MCWD) for urban landscape irrigation by MCWD customers. The additional recycled water delivery is a component of the approved RUWAP, an urban recycled water project developed by MCWD. The source water for the capacity expansion is entirely from contractual rights to the return of its municipal wastewater in addition to a portion of M1W's summer water allocation per the Amended and Restated Water Recycling Agreement. In April 2016 (amended in October 2017), M1W Board of Directors approved joint (shared) use of product water storage and conveyance facilities,

---

<sup>4</sup> CalAm submitted Application A.12-04-019 (*Application of CAW for Approval of the Monterey Peninsula Water Supply Project*) to the California Public Utilities Commission.

<sup>5</sup> The RUWAP is a recycled water project developed by MCWD in cooperation with M1W. RUWAP was originally developed to help MCWD meet the overall needs of its service area, delivering tertiary-treated and disinfected recycled water produced at the existing Salinas Valley Reclamation Plant ("SVRP") to urban users in the MCWD service area and former Fort Ord.

including Blackhorse Reservoir, with MCWD for the RUWAP and the PWM/GWR Projects (PWM/GWR EIR Addendum No. 3)<sup>6</sup>.

### **Previously Approved PWM/GWR Project Overview**

**Figure 2** includes a map of the previously approved PWM/GWR Project. The previously approved PWM/GWR Project components identified above include<sup>7</sup>:

#### **Source Water Diversion and Storage Sites**

These facilities include source water diversion, conveyance, and storage facilities at Blanco Drain, Reclamation Ditch, the Salinas Pump Station, Salinas Industrial Wastewater Treatment Facility (SIWTF) and associated conveyance system. The PWM/GWR project also includes diversion structures and pipelines that have not been funded or constructed, including at the western edge of Lake El Estero and at Tembladero Slough.<sup>8</sup> The approved and funded facilities under construction will enable new source waters to be diverted into the existing municipal wastewater collection system and to the RTP to supplement the existing incoming wastewater flows.

#### **Treatment Facilities at the Regional Treatment Plant**

These include the AWPf and pump station facilities at the RTP that provide treatment and production of purified recycled water. The AWPf will include a state-of-the-art treatment system that uses multiple membrane barriers to purify the water, product water stabilization to prevent pipe corrosion due to water purity, a pump station, and a brine and wastewater mixing facility. The water treated by the AWPf will meet or exceed federal and state drinking water standards, including those set forth in Titles 17 and 22. The approved PWM/GWR Project also includes modifications to the Salinas Valley Reclamation Plant to improve delivery of recycled water to agricultural users, although this component has not been funded.

#### **Product Water Conveyance**

These facilities include the Product Water Conveyance Pipeline and Blackhorse Reservoir shared by the PWM/GWR and RUWAP projects and appurtenant facilities to transport the purified recycled water from the AWPf to the Seaside Groundwater Basin for injection.

#### **Injection Well Facilities**

The injection facilities include new wells (eight in total, four in the shallow and four in the deep aquifers), back-flush facilities, pipelines, electricity/power distribution facilities, and electrical/motor control buildings.

---

<sup>6</sup> Note: the combined RUWAP-PWM conveyance system, also termed the Shared Product Water Conveyance Facilities, was also approved by MCWD in March 2016 (RUWAP Addendum No. 3).

<sup>7</sup> Source: Resolution October 2015, Monterey Regional Water Pollution Control Agency Board (now M1W) as modified by October 2017 Approvals (including Addendum No 3 to the PWM EIR and Addendum No. 3 to the RUWAP EIR).

<sup>8</sup> The Tembladero Slough diversion is no longer being pursued as part of the PWM/GWR Project due conditions imposed by the State Water Resources Control Board in water rights permits for the Blanco Drain and the Reclamation Ditch source water diversions.



### **CalAm Distribution System**

CalAm distribution facilities necessary for water delivery from the Seaside Groundwater Basin and CalAm water distribution system improvements (Monterey Pipeline and Hilby Pump Station) to deliver the extracted groundwater to CalAm customers.

As approved, the PWM/GWR Project will provide the following benefits when it is fully operational:

#### **Replenishment of the Seaside Groundwater Basin**

The PWM/GWR Project will replenish the Seaside Groundwater Basin with 3,500 AFY of purified recycled water to replace a portion of CalAm's water supply as required by state orders, including State Regional Water Resources Control Board (State Water Board) Order WR 2009-0060, as amended by Order WR 2016-0016. This will enable CalAm to reduce its diversions from the Carmel River system by up to 3,500 AFY by injecting the same amount of purified recycled water into the Seaside Groundwater Basin. The PWM/GWR Project also includes a drought reserve program that provides a total of 200 AFY (up to 1,000 AF total) of water to the Seaside Groundwater Basin.<sup>9</sup>

#### **Additional Recycled Water for Agricultural Irrigation in Northern Salinas Valley**

The approved PWM/GWR Project included diverting and using additional new source waters and improving the existing water recycling facility at the RTP (the Salinas Valley Reclamation Plant) to produce additional recycled water for use in the CSIP's agricultural irrigation system. It is anticipated that in normal and wet years, thousands of acre-feet of additional recycled water supply could be created for agricultural irrigation purposes.

#### **Existing Environmental Compliance and Permits**

The PWM/GWR Project has undergone substantial environmental review and regulatory compliance. Key environmental review documents and permitting approvals include the following:

- The certified PWM/GWR Project EIR prepared to support project approvals and meet the requirements of the Clean Water State Revolving Fund loan program that is partially funded through the U.S. Environmental Protection Agency (certified October 8, 2015; available at: [www.purewatermonterey.org](http://www.purewatermonterey.org)) and Addenda by responsible agencies, and by M1W, the lead agency. Addendum No. 1 (2016) and Addendum No. 2 (2017) to the PWM/GWR EIR were approved by the MPWMD (related to the Monterey Pipeline and Hilby Pump Station) and Addendum No. 3 to the PWM/GWR EIR was approved by the M1W in October 2017 (related to Shared Conveyance Facilities and Increased Capacity at the AWPf).

---

<sup>9</sup> The Expanded PWM/GWR Project will not change either of the two groundwater banking programs (drought reserve and operational reserve) that are part of the approved PWM/GWR Project. The drought reserve would build a water storage account of up to 1,000 acre-feet (AF) of water in the Seaside Basin during normal and wet years. The extra recharge during normal and wet years would be offset by an increase in CSIP deliveries and a corresponding decrease in Seaside Groundwater Basin injection by up to 1,000 AFY during dry years, during which CalAm will continue to pump 3,500 AFY by using some of the drought reserve account. .



- Letter of concurrence from the State Historic Preservation Office completing the NHPA Section 106 process (April 19, 2016);
- U.S. Fish and Wildlife Service Biological Opinion for compliance with Endangered Species Act (ESA) Section 7 Consultation (December 20, 2016);
- Letter of concurrence from the National Oceanic and Atmospheric Administration National Marine Fisheries Service (December 5, 2016);
- Clean Water Section 404 Authorization to Fill Waters of the U.S. from the U.S. Army Corps of Engineers for the Blanco Drain and Reclamation Ditch Diversions (Source Waters components) (January 18, 2017);
- Clean Water Section 401 Water Quality Certification from the SWRCB for the Blanco Drain and Reclamation Ditch Diversions (March 30, 2017);
- California Fish and Game Code Section 1602 Lake and Streambed Alteration Agreement for the Blanco Drain and Reclamation Ditch Diversions (June 8, 2017);
- SWRCB Water Rights Permits 21376 and 21377 for the diversion of surface waters from Blanco Drain and Reclamation Ditch (March 17, 2017);
- Clean Water State Revolving Fund (CWSRF) CEQA findings and a Notice of Determination (January 2017);
- State Lands Commission, Land Lease Approval (April 2017);
- U.S. Bureau of Reclamation, Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) Pure Water Monterey Groundwater Replenishment Project (June 20, 2017);
- National Pollutant Discharge Elimination System Permit / Waste Discharge Requirements Reissuance for the Monterey One Water Regional Wastewater Treatment Plant and Advanced Water Purification Facility Discharge to the Pacific Ocean (December 6, 2018); and
- National Oceanic and Atmospheric Administration, Monterey Bay National Marine Sanctuary, EA and FONSI for the Authorization of the National Pollutant Discharge Elimination System Permit for the Monterey One Water Regional Wastewater Treatment Plant and Advanced Water Purification Facility (April 1, 2019).

In addition, private and local agency permits and approvals (including easements, right of entry agreements, land lease/sales, and encroachment permits), have been secured for the PWM/GWR Project. Entities include: CalAm, Cities of Seaside, Marina, Salinas; Fort Ord Reuse Authority; Marina Coast Water District; Monterey Bay Air Resources Board; Monterey County Health Department; Environmental Health Division; Monterey County Resource Management Agency; Monterey County Water Resources Agency; Monterey Peninsula Water Management

District;<sup>10</sup> Monterey Peninsula Airport District/Airport Land Use Commission; Monterey Regional Waste Management District; Pacific Gas and Electric; Seaside Groundwater Basin Watermaster; and local landowners.

## **Expanded PWM/GWR Project Description**

Environmental documentation previously completed divided the PWM/GWR Project into the following components, as described in this document: Source Water Diversion and Storage Sites, Treatment Facilities at the Regional Treatment Plant, Product Water Conveyance, Injection Well Facilities, and CalAm Distribution System. To increase the amount of water available to CalAm under the Expanded PWM/GWR Project, several changes to these PWM/GWR Project Components would be required. See **Figure 3**. The following describes the proposed changes under this Expanded PWM/GWR Project:

### **Changes to Source Water Diversion and Storage Sites**

No new source water diversion and storage sites are necessary to achieve the Expanded PWM/GWR Project's recycled water yield objective of an additional 2,250 AFY of replacement supplies. The Expanded PWM/GWR Project is designed to utilize existing M1W contractual rights to source waters and wastewaters.

However, one or more future urban storm water to sanitary sewer diversions (such as planned sanitary sewer diversion projects in Seaside and Monterey) may provide additional source water for the Expanded PWM/GWR Project. These additional source waters would not increase the Expanded PWM/GWR Project yield above 2,250 AFY. Rather, these additional source waters, if they come to fruition, would provide greater supply reliability for the Expanded PWM/GWR Project.

- The City of Seaside's proposed 90-inch Storm Water Diversion and Trash Capture Project would involve the installation and operation of a diversion structure on the 90-inch storm drain to divert dry weather and wet weather flows to hydrodynamic separators designed to remove sediment and debris from the water prior to diversion to the sanitary sewer. .
- Additional urban storm water to sanitary sewer diversion projects have been described in the Monterey Peninsula Water Recovery Study (see Appendix D of <http://montereysea.org/stormwater-resource-plan/>). The diversion project (the "diversion to sanitary sewer" portion) that was the top-ranked project from that study would be located near Hartnell Gulch.

### **Changes to Treatment Facilities at the Regional Treatment Plant**

*Modifications to the Advanced Water Purification Facility.* The design and physical features of the AWPf currently under construction (the PWM/GWR Project as approved) allow operation of the AWPf at a peak capacity of 5.0 mgd. Expanding the AWPf to produce up to 7.6 mgd will require installation of additional treatment and pumping equipment, chemical storage, pipelines

---

<sup>10</sup> MPWMD approved the Hilby Pump Station and changes to the Monterey Pipeline through the required Water Distribution System permit, using the PWM/GWR EIR and Addenda No. 1 and 2.

and facility appurtenances within the 3.5-acre existing building area. The AWPf would be designed to produce a seasonal peak of 7.6 mgd.

### **Changes to Product Water Conveyance**

The Expanded PWM/GWR Project would require an additional Product Water Conveyance pipeline and, potentially, an additional booster pump station. To serve new injection well sites, the Expanded PWM/GWR Project would require the addition of up to 2 miles of 16-inch diameter pipeline and appurtenances. The pipeline would be located within existing unpaved and paved roads from the Marina Coast Water District's Blackhorse Reservoir to a new injection well site located in the area on the south side of Eucalyptus Road near the eastern boundary of the City of Seaside. See **Figure 4** for the location of this new purified recycled water pipeline that would carry water from the Blackhorse Reserve to the new eastern injection well facilities area.

In addition, a new booster pump station may be required to accommodate the additional water produced by the AWPf. Due to friction losses in the conveyance pipeline, the conveyance system may not have enough energy to enable adequate injection of purified recycled water at certain well sites (for example those at the highest elevations) without additional pumping. Therefore, a small booster pump station may be required to boost the flows to one or more potential injection well sites within the original injection well facilities area. If needed, this pump station would be within the boundaries of the previously approved injection well facilities construction areas.

### **Changes to Injection Well Facilities**

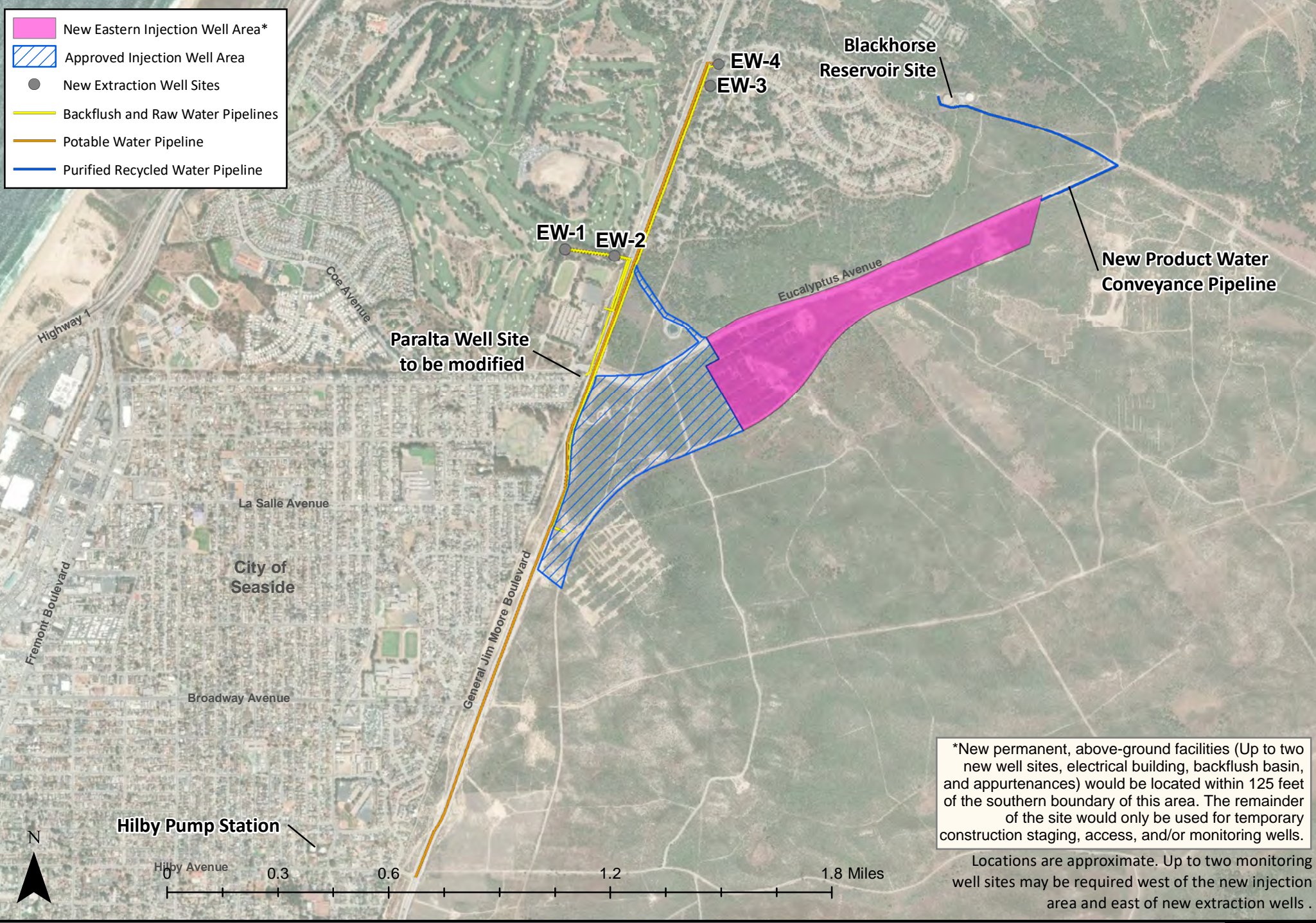
*Modifications to Injection Well Facilities.* The approved PWM/GWR Project includes subsurface groundwater recharge facilities, including shallow (or vadose zone) and deep injection wells located within the Seaside Groundwater Basin in the area shown on **Figure 2**, the Approved Injection Well Facilities Area. The existing vadose zone wells inject water into the unsaturated soils overlying the uppermost aquifer (the unconfined Paso Robles Aquifer), and the deeper wells inject into the confined Santa Margarita Aquifer. Final project design and project permitting have resulted in minor modifications to the layout of the Injection Well Facilities site and have provided information to the team to refine the locations of the remaining two (2) deep wells originally planned. The PWM/GWR Project EIR evaluated four clusters of injection well facilities, each with one deep injection well and one shallow injection well. For an Expanded PWM/GWR Project, M1W would construct the remaining two (2) of the four (4) planned deep injection wells. However, for the Expanded PWM/GWR Project one of those planned deep injection well sites would be relocated farther to the northeast to the new Eastern Injection Well Area, and one additional new deep injection well would be constructed in the new Eastern Injection Well Area. No new vadose zone wells are proposed compared to the approved PWM/GWR Project that included four (4) new vadose zone wells. With the expansion, the total number of injection wells (8) will be no more than with the Approved PWM/GWR Project.<sup>11</sup> Each well would be equipped with associated backwash pumps and appurtenances. Under the approved PWM/GWR Project,

---

<sup>11</sup> The Approved PWM/GWR Project included analysis of eight (8) total injection wells: four (4) shallow and four (4) deep. The Expanded PWM/GWR Project may require eight (8) total injection wells with up to five (5) deep injection wells and up to three (3) shallow injection wells.

monitoring wells were proposed to be installed between the new deep injection well site and nearest downgradient extraction well. Although the locations of these monitoring wells are not shown on **Figure 3** and **Figure 4**, they would be located in the area between General Jim Moore Boulevard and the eastern injection wellfield area shown. This location would be different from the location for the monitoring wells under the approved PWM/GWR Project. A new electrical building and percolation basin for backwash water disposal (percolation into the vadose zone) would be included at a central location within the eastern Injection Well Facilities Area. The Expanded PWM/GWR Project would potentially include increasing the capacity of the approved percolation basin.





- New Eastern Injection Well Area\*
- Approved Injection Well Area
- New Extraction Well Sites
- Backflush and Raw Water Pipelines
- Potable Water Pipeline
- Purified Recycled Water Pipeline

\*New permanent, above-ground facilities (Up to two new well sites, electrical building, backflush basin, and appurtenances) would be located within 125 feet of the southern boundary of this area. The remainder of the site would only be used for temporary construction staging, access, and/or monitoring wells.

Locations are approximate. Up to two monitoring well sites may be required west of the new injection area and east of new extraction wells.

Document Path: D:\GIS\GIS\_Progects\2013-13 GW\Final Product\Expanded Capacity\_Program\Injection\_Estimate\07\_2019\Map\_NCP.mxd



## **Changes to CalAm Distribution System**

*Extraction Wells.* For CalAm to utilize the additional purified recycled water produced by the Expanded PWM/GWR Project, additional potable water extraction wells, wellhead treatment and pipelines would be required.<sup>12</sup> See **Figure 4** for proposed locations of the new CalAm facilities. To reliably meet the proposed yield of the Expanded PWM/GWR Project, CalAm would construct and operate two (2) new extraction wells, plus two additional extraction wells to provide system redundancy/back-up. Collectively these new extraction wells are identified as Extraction Wells 1 through 4. Extraction Wells 1 and 2 would be located just north of Seaside Middle School. The Blackhorse Golf Course is located to the north and west of Extraction Well sites 1 and 2. Extraction Wells 3 and 4 would be located just to the east of General Jim Moore Boulevard, near the southeast corner of the intersection of General Jim Moore Boulevard and Ardennes Circle on U.S. Army-owned property in the Fitch Park neighborhood of the Ord Military Community. Extraction Wells 3 and 4 would be designed consistent with the Aquifer Storage and Recover (ASR) Wells 5 and 6 as analyzed in previous environmental documentation prepared for the MPWSP; however, these wells would only include the capability to extract and treat groundwater, and would not include any above-ground facilities needed to enable injection. Extraction Wells 3 and 4 would be constructed to provide additional system extraction redundancy only. Each extraction well would include a well pump and motor, chlorination dosing equipment, and associated electrical equipment, which would be contained on an approximately 100 square foot concrete pad. CalAm may elect to install emergency generators at one or more extraction well sites, depending upon their need for system reliability. No new extraction wells were proposed or approved as part of the PWM/GWR Project, thus these extraction wells were not included in the construction areas of the PWM/GWR Project approved on October 8, 2015.

*Potable and Raw Water Pipelines.* In addition, for the Expanded PWM/GWR Project CalAm would construct and operate new potable and raw water pipelines to convey the water from the new extraction wells to treatment facilities (including new wellhead chlorination system at the existing CalAm Paralta Well) and to the existing CalAm distribution system. An up to 36-inch pipeline that would be up to approximately 2 ½ miles in length would be installed in the General Jim Moore Boulevard right of way. The pipeline would begin at Extraction Well 4 (the northern most extraction well) and connect to the existing ASR pipe network at ASR Wells 1 and 2 (Santa Margarita site). From that point, water would be distributed to CalAm customers throughout the region. This new potable water pipeline was not included in the approved PWM/GWR Project.

## **Potential Environmental Impacts**

M1W, as the CEQA Lead Agency, proposes to prepare a focused Supplemental EIR to support the approval of changes to the PWM/GWR Project. The Supplemental EIR on the Expanded PWM/GWR Project will evaluate potential environmental effects associated with construction, operation, and maintenance activities. When M1W decides whether to approve the changes to the project, the M1W Board must consider the previous EIR as revised by the Supplemental EIR.

---

<sup>12</sup> The approved PWM/GWR Project assumed extraction would occur using existing potable wells, disinfection treatment processes, and distribution systems (after the injected water meets regulatory-required residence time with groundwater in the Seaside Basin).

Therefore, the M1W Board will ultimately consider the Supplemental EIR in combination with the previous PWM/GWR EIR, which was certified in October 2015, and the adopted Addenda (refer to Approved PWM/GWR Project Facilities and CEQA Documentation, above).

The Supplemental EIR is intended to serve as a supplement to the previously adopted 2015 Final EIR, impacts and conditions presented in the previous EIR will serve as the primary base of comparison for the analysis. Elements of the prior analysis that are unchanged will not be repeated in the Supplemental EIR.

The Supplemental EIR for the Expanded PWM/GWR Project will assess the following issues of potential environmental effects focusing only on the revised project components as discussed above:

### ***Aesthetics Resources***

Expanded project facilities would predominantly be underground or located on existing water and wastewater facility sites. Those facilities that are not located on existing water and wastewater facility sites would be designed to visually blend into the environment through use of vegetative screening and/or appropriate materials and colors. The Supplemental EIR will evaluate visual/aesthetic impacts related to the Expanded PWM/GWR Project's limited above-ground facilities, including visual character, scenic vistas, and new sources of light and glare.

### ***Agricultural and Forest Resources***

There are no agricultural or forest resources within the Expanded PWM/GWR Project sites where components would be constructed. The evaluation of agricultural and forest resources as addressed in the 2015 Final EIR will not be updated in the Supplemental EIR.

### ***Air Quality and Greenhouse Gas Emissions***

The project site is located within the Monterey Bay Air Resources District (formerly the Monterey Bay Unified Air Pollution Control District). Construction of the expanded facilities would generate emissions from construction equipment exhaust, earth movement, construction workers' commutes, and material hauling. Operation of pump stations, wells, and treatment facilities would require use of electricity, which would generate greenhouse gas emissions. The Supplemental EIR will evaluate construction- and operation-related emissions of criteria air pollutants and greenhouse gas emissions from these expanded facilities and expanded operations.

### ***Biological Resources***

The Supplemental EIR will evaluate potential impacts of the expanded project facilities on terrestrial special-status animal and plant species, sensitive habitats, mature native trees, and migratory birds that may occur in the Expanded PWM/GWR Project area. The Supplemental EIR will also address potential impacts to marine resources from the expanded project and compliance with the California Ocean Plan water quality objectives.

### ***Cultural Resources***

Construction of new expanded facilities both above and below-ground could encounter previously unknown archaeological or paleontological resources during ground disturbance and excavation. The Supplemental EIR will assess if there are any potential effects of the Expanded PWM/GWR Project on cultural resources, including archaeological, paleontological, and Native American resources, and Tribal cultural resources.

### ***Geology, Soils, and Seismicity***

Construction and operation of the Expanded PWM/GWR Project will occur in a seismically active region. The Supplemental EIR will focus on new or expanded areas of ground-disturbing activities, soils and seismic hazards, and potential for soil erosion from the expanded facilities.

### ***Hazards and Hazardous Materials***

Construction of the Expanded PWM/GWR Project facilities would require excavation of the existing ground surface, which could uncover contaminated soils or hazardous substances that pose a substantial hazard to human health or the environment. The Supplemental EIR will focus evaluation on the potential for hazardous materials to be encountered during construction of the expanded facilities. The analysis will also consider the proper handling, storage, and use of hazardous chemicals that may be used during construction and operation of the expanded facilities.

### ***Hydrology and Water Quality***

Through the use of groundwater modeling and hydrogeologic analyses, the Supplemental EIR will evaluate changes in local groundwater quality, storage, and levels within the groundwater basins as a whole and their subbasins, as appropriate. The Supplemental EIR will describe the recharge, storage, and recovery capacities of the Seaside Groundwater Basin and describe potential impacts of recharge and extraction activities at the Expanded PWM/GWR Project locations. Potential effects on the seawater/freshwater interface (i.e., seawater intrusion) will also be evaluated. The Expanded PWM/GWR Project would be designed to comply with California Department of Public Health and Regional Water Quality Control Board standards and requirements to protect public health and water quality.

Construction and operation of the Expanded PWM/GWR Project could affect surface water quality and hydrologic systems/processes in the construction areas. Potential impacts to be evaluated include alteration of drainage patterns and increase in stormwater flows due to increase in the amount of impervious surfaces, and degradation of surface water quality as a result of erosion and sedimentation, hazardous materials release during construction, and construction dewatering discharges. The Expanded PWM/GWR Project would be designed to comply with standard construction and operational requirements, the California Ocean Plan, and permits under the National Pollutant Discharge Elimination System and Waste Discharge Requirements.

### ***Land Use Planning***

Implementation of the Expanded PWM/GWR Project includes construction and operation of new facilities and water supply infrastructure within the same planning jurisdictions as evaluated in the PWM/GWR EIR. The Supplemental EIR will focus on the proposed expanded facilities and determinations of consistency with established plans, policies, and regulations, as well as compatibility with the existing and future land use patterns in the area, including adjacent land uses. Because most conveyance facilities will be underground, and because the proposed treatment facilities would be located at the existing AWPf site at the M1W Regional Treatment Plant, significant effects on land use patterns are not anticipated.

### ***Mineral Resources***

The PWM/GWR EIR addressed local mineral resources; the evaluation of these resources as addressed in the 2015 Final EIR will not need to be updated in the Supplemental EIR.

### ***Noise and Vibration***

Implementation of the Expanded PWM/GWR Project would require construction and operation of expanded facilities that would potentially generate additional noise and vibration. The Supplemental EIR will focus on the potential noise sources and evaluate the proximity of sensitive receptors to the Expanded PWM/GWR Project components to assess whether the facilities would comply with local noise policies and ordinances.

### ***Population and Housing***

Implementation of the Expanded PWM/GWR Project would enhance the reliability of the water supply within the Monterey Peninsula area. The project would provide replacement water rather than new water to serve growth. The Supplemental EIR will identify current population and employment projections and identify local planning jurisdictions with the authority to approve growth and mitigate secondary effects of growth.

### ***Public Services and Recreation***

Implementation of the Expanded PWM/GWR Project would be unlikely to affect demand for public services, or to require new or expanded facilities for public service providers. The 2015 EIR previously assessed the potential for impacts on police and fire protection services, schools, parks and recreational facilities. This evaluation will not need to be updated in the Supplemental EIR.

### ***Water Supply and Wastewater Systems***

Implementation of the Expanded PWM/GWR Project would enhance the reliability of the water supply within the Monterey Peninsula area. The Supplemental EIR will address the Expanded PWM/GWR Project's effect on water supplies. Implementation of the Expanded PWM/GWR Project is not expected to have a new adverse impact related to wastewater treatment facilities.

### ***Transportation and Traffic***

The Supplemental EIR will generally describe the types of construction activities that would be generated by the Expanded PWM/GWR Project focusing on temporary increases in traffic volumes along local and regional roadways from construction of expanded facilities.

### ***Utilities, Service Systems, and Energy***

Implementation of the Expanded PWM/GWR Project would result in increased use of pump stations, extraction wells, conveyance and treatment facilities, which would increase the amount of electricity use required locally to achieve regional water supply goals. The Supplemental EIR will evaluate energy consumption from the expanded facilities and compare the proposed energy use with energy demands in the 2015 EIR.

### ***Cumulative and Growth Inducing Impacts***

The Supplemental EIR also will evaluate potential growth-inducing impacts that could result from implementation of the Expanded PWM/GWR Project. The Supplemental EIR will address whether the Expanded PWM/GWR Project would have impacts that are individually limited, but cumulatively considerable when combined with the impacts of other past, present and reasonably foreseeable future projects (i.e., cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).