



MONTEREY PENINSULA

**WATER SUPPLY  
PROJECT**

**NEWSLETTER**

**2020/Q4**

# COASTAL COMMISSION CONSIDERS PERMIT



## **ALSO INSIDE**

**PROJECT DESCRIPTION  
PROJECT UPDATE**

# DESAL PERMIT APPLICATION PENDING BEFORE COASTAL COMMISSION

**T**he final permit needed to begin construction of the Monterey Peninsula Water Supply Project desalination slant wells was refiled on November 5, 2020 with the California Coastal Commission. After reviewing the application, agency staff have requested additional information that California American Water is currently compiling and will soon submit.

“Our hope is for a hearing in 2021,” said California American Water Vice President of Engineering Ian Crooks. “The need for desal is more urgent than ever with significant pumping restrictions on the Carmel River going into effect at the end of this year. Also concerning is that without desal, we are becoming more reliant on the Seaside groundwater basin for the majority of our water supplies.”

Crooks reported the company has been hard at work crafting a plan to maximize existing supplies to keep the community in water even as additional restrictions on our water sources go into effect. Part of this plan involves optimizing operations and building new infrastructure to maximize diversion and storage of any excess Carmel River wet season flows in the Seaside groundwater basin via the Aquifer Storage and Recovery program.

“Additionally, we need to transition from historically delivering the majority of water supply from the Carmel River, south to north, to now pumping and transporting the majority of supply from the Seaside basin, north to south,” explained Crooks. “This entails necessary improvements to the system, including a proposed new pipeline in General Jim Moore Boulevard that will help maximize Carmel River water storage in wet seasons while simultaneously allowing extraction of other water supplies, such as Pure Water Monterey, from the Seaside basin on a year-round basis to meet demands.”

Permitting for the pipeline required to make these improvements was recently denied by the Monterey Peninsula Water Management District. However, Crooks stated the company will seek

reconsideration because it critically important that we maximize all existing water supplies just to meet the current water demands of the community.

“Until desal comes online, the water supply picture for the Monterey Peninsula depends heavily on rainfall, existing supplies reliably running at nearly 100 percent, and the amount of customer demand. With the pandemic, 2020 was clearly an unusual year with a significant reduction in consumption by businesses and hotels and an uptick in residential use. As we clear through the pandemic, it is reasonable to expect commercial demand to fully rebound as businesses open and tourism returns. And we would expect some of the increase in residential demand to become permanent as work from home is becoming the norm. Everything continues to point to desal. It’s the only way we solve the water supply needs for the long-term,” Crooks said.

Crooks pointed out that development of the Pure Water Monterey Expansion recycled water project would help with supply challenges but is not sufficient to solve them.

“If that project can overcome the issues raised during its environmental review and be developed, it would certainly help – but it alone will not supply water needed to protect and replenish the Seaside Basin, meet customer demand in peak periods and provide for economic rebound and affordable housing. With the hundreds of millions that have already been invested by California American Water and other local agencies, we need a solution that will take care not only of the immediate future, but future generations.”

In conjunction with refiled its permit application with the California Coastal Commission, California American Water also initiated a dialogue with the City of Marina to address social and environmental justice concerns raised during the Commission review process last year. Discussions between the two parties continue.



**"THE NEED FOR DESAL  
IS MORE URGENT  
THAN EVER"**



## ABOUT THE PROJECT

The Monterey Peninsula is facing a severe water supply problem. That's because the State Water Resources Control Board has ordered California American Water to significantly reduce its pumping of water from the Carmel River.

This order coupled with pumping restrictions in other parts of the county means that nearly 70 percent of the Monterey Peninsula community's historic water supply must be replaced.

The current project is comprised of three elements:

- [Desalination](#)
- [Aquifer Storage and Recovery](#)
- [Pure Water Monterey: A Groundwater Replenishment Project](#)

This multi-faceted approach brings numerous advantages over a single-source solution. For one, it will enable California American Water to build a smaller desalination plant that will reduce the project's environmental footprint.

Secondly, this strategy will build-in redundancy that is critical for all municipal water supply systems, allowing the water system to continue to provide water if one component becomes temporarily unavailable.

## DESALINATION

The Monterey Peninsula Water Supply Project consists of sub-surface slant intake wells, a desalination plant, and related facilities including source water pipelines, product water pipelines and brine disposal facilities.

The desalination plant will produce 6,250 acre-feet of treated water per year. One acre-foot is

equal to one acre filled with one foot of water, which is typically enough water to support four households on the Monterey Peninsula for a year. California American Water purchased a 46-acre parcel of land located off of Charles Benson Road in unincorporated Monterey County as the site for the proposed desalination plant.

California American Water has also purchased permanent easements near the coastline in the North Marina area to host its slant intake wells. California American Water's project will use a series of slant wells designed to draw ocean water.

The slant wells will be up to 800 feet long. The final location, layout and configuration will be based on the results of the slant test well and groundwater modeling work. In addition to the plant and its intake wells, other pipeline, storage and pump facilities will need to be constructed to ultimately deliver water to customers.

## PURE WATER MONTEREY

The proposed Pure Water Monterey project, a partnership between Monterey One Water and the Monterey Peninsula Water Management District, recycles wastewater through an advanced treatment process. The resulting highly purified drinking water will be injected into the Seaside groundwater basin.

A new, advanced water treatment plant will be constructed for the project in addition to a number of supporting facilities. Source water for this project will go through a three-step treatment and purification process of microfiltration, reverse osmosis and oxidation with ultraviolet light and hydrogen peroxide — all commonly used in numerous industries and food manufacturing.

## AQUIFER STORAGE AND RECOVERY

California American Water will expand its current ASR project – a partnership with the Monterey Peninsula Water Management District – which captures excess winter flows from the Carmel River for storage in the Seaside Aquifer and withdrawal during the dry, summer months. Winter flows are considered excess only when they exceed what is needed to protect the river's threatened population of steelhead.

For the Monterey Peninsula Water Supply Project, the company plans to construct two additional ASR wells that will increase capacity of the program and allow the desalination plant to be smaller than would be needed without the wells.

## BUDGET\*

Subsurface Intake System: \$80M  
(36% spent to date)

Desalination Plant: \$132M  
(46% spent to date)

Pipeline Facilities: \$67M  
(43% spent to date)

Pipeline/Pump Station: \$50M  
(100% spent to date)

\*NOTE: These figures are based on a 6.4 MGD desalination facility. These figures include some contingency costs and therefore differ from the capital costs listed in the settlement.



Future editions of this newsletter will contain information on project expenditures, construction progress and milestones. Once collection begins for the Construction Funding Charge (or Surcharge 2), amounts collected by the charge will also be reported. Progress regarding slant well construction and information regarding slant well monitoring data will also be reported in future editions, as well as estimates as to the return water obligation and actual return water obligation calculated.