



MONTEREY PENINSULA

**WATER SUPPLY  
PROJECT**

**NEWSLETTER**

**2021/Q1**

# **COASTAL COMMISSION REVIEW CONTINUES**



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# COASTAL COMMISSION DESAL PERMIT REVIEW PROCESS CONTINUES

In early March, California American Water responded to the Coastal Commission staff's request for additional information related to its permit application for the Monterey Peninsula Water Supply Project. The Coastal Commission has jurisdiction over the project's proposed slant wells that would draw ocean water from beneath the sand to be treated at the desalination facility that would be built further inland just outside the City of Marina.

The company's 118-page response to the Commission continued a dialogue with staff, who have indicated the information provided in many instances is now adequate, but that questions remain.

"At this point, we've responded to the majority of the Coastal staff's questions and look forward to working cooperatively with them as we complete the few remaining items," said California American Water Vice President of Engineering Ian Crooks. "Our aim is to have the application deemed complete in time for a hearing later this year. With such a significant state cutback order going into effect on the Carmel River later this year, it's important we continue to make progress on a long-term water supply solution for the Monterey Peninsula. Rainfall is certainly a concern this year and we are pursuing interim supply sources to help carry us through until the desal project can come online to support our community's needs while protecting our limited natural resources."

Interim supply projects currently being pursued by the company include additional ASR wells and a pipeline project that would allow for simultaneous maximization of supplies from the ASR and Pure Water Monterey Project.

"There are so many factors to consider including potential changes in customer demand, but if we were to have a worst case scenario— no new water projects and a drought year-- we would certainly face challenges in meeting customer water demand in the 2022-2023 water year, after the CDO cutbacks have been fully enforced," added Crooks. "In that case, additional emergency conservation measures may be needed."

Desalination, which isn't linked to rain or snowpack, is widely regarded as a potential solution to California's perennial droughts. With improved technology, desalination costs have decreased significantly over the past decades making it a more viable option for many communities on California's coast. In addition, advances in recycling energy use within the desalination process have also reduced environmental impacts. Policymakers continue to look at desalination as part of the portfolio of potential options to help address California's pressing water needs.

"In Monterey, we have exhausted all other options," concluded Crooks. "Our customers have done a tremendous job of saving water and have one of the lowest per capita water uses in the state. We are using recycled water widely and look for more ways to do so. Our conjunctive use program maximizes efficiency of our limited groundwater and Carmel River flows. Desal is needed to provide long-term water security for the community. If the dry weather pattern persists, the urgency for the project will be made even more clear."



An aerial photograph of the ocean with a large, white, foamy wave crest in the lower half. The water is a deep teal color. A quote is overlaid in the upper left quadrant.

**“In Monterey, we have  
exhausted all other options.”**



## 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  
(34% spent to date)

Desalination Plant: \$132M  
(49% spent to date)

Pipeline Facilities: \$67M  
(46% 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.