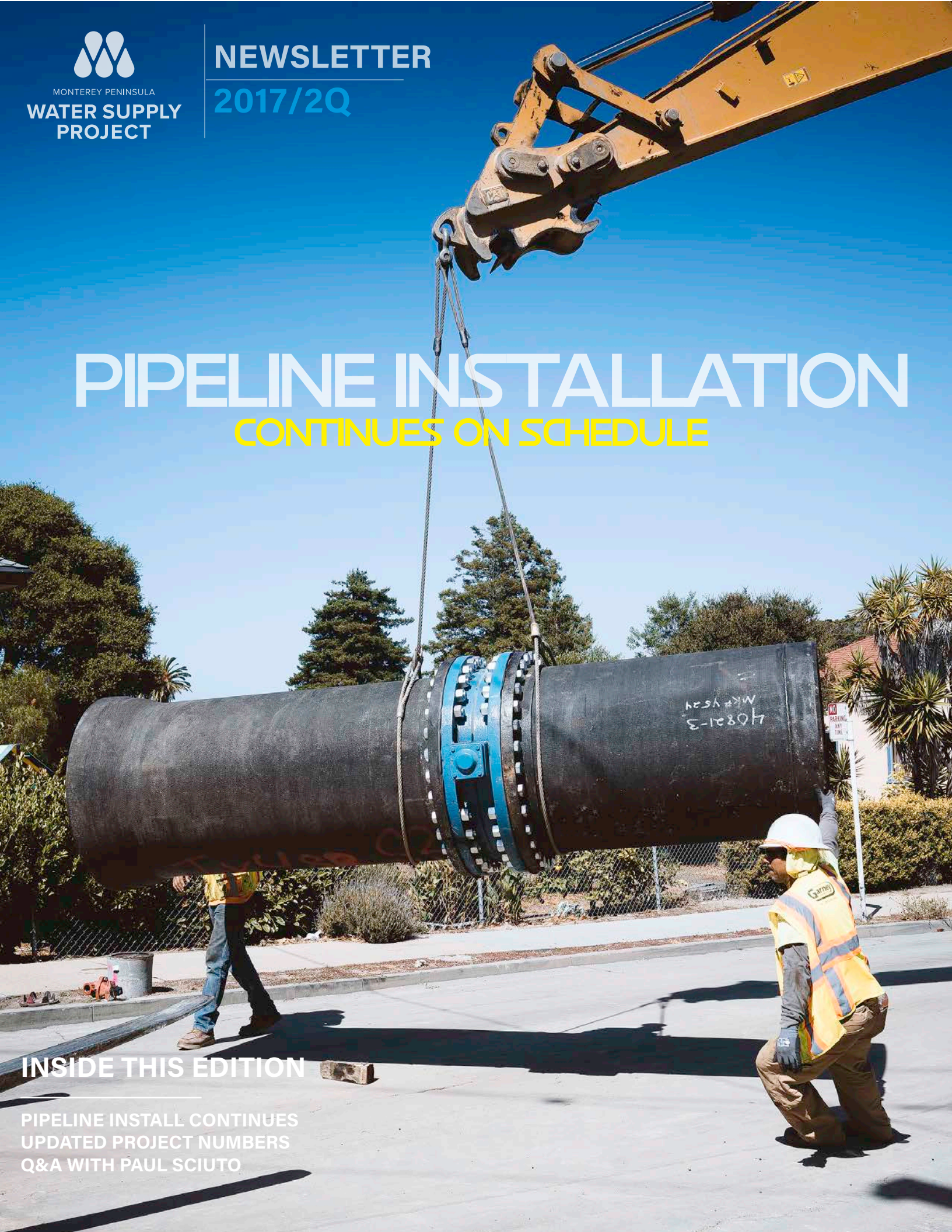


PIPELINE INSTALLATION CONTINUES ON SCHEDULE



INSIDE THIS EDITION

PIPELINE INSTALL CONTINUES
UPDATED PROJECT NUMBERS
Q&A WITH PAUL SCIUTO



PIPELINE INSTALLATION

PAGE 4



PIPELINE INSTALLATION ON SCHEDULE

W With more than one-third of the project complete, crews continue to make progress on the Monterey Pipeline, the first major piece of infrastructure to be constructed for the Monterey Peninsula Water Supply Project.

The pipeline, which will carry water from the Pure Water Monterey project and eventually, from California American Water's proposed desalination facility, extends from the City of Seaside to the City of Pacific Grove, passing through residential and commercially zoned sections of Monterey.

The first step in project construction began late last year with a series of potholes, which were drilled at more than 400 sites along the pipeline alignment to confirm the location of existing underground utilities and avoid conflicts with the new 36" pipe. The second phase of work involved relocating 65 water services and their associated distribution lines.

With these phases finished, the third and fourth construction phases -- installation of the 36" pipe and repaving of streets -- are now underway. Despite heavy rains this winter, currently more than two miles of pipe have been installed and one mile of new road paving is now complete.

"The construction team is averaging approximately 120 feet per day, which was our target at the start of the project," said Engineering and Project Manager Chris Cook.

"The work tends to be more time consuming in intersections and areas where there are many existing utilities beneath the street. In less con-

gested sections, the crews are installing pipe at a good pace.

The heavy rains this winter did slow us down, but we managed to make up for it elsewhere. All in all, we expect to be finished with the entire pipeline in early 2018, which keeps us ahead of the initial state-ordered deadlines for progress on a new water supply."

In 2009, the State Water Resources Control Board issued a Cease and Desist Order on pumping from the Carmel River, the Monterey Peninsula's current major source of water supply.

**"THE CONSTRUCTION TEAM IS
AVERAGING APPROXIMATELY
120 FEET PER DAY."**

The order was amended in 2016 and now sets certain milestones for advancement of the water supply project. Penalties for missed milestones include water supply cutbacks that could lead to significant water rationing for residents and businesses on the Monterey Peninsula.

Pipeline installation will begin in downtown Monterey later this summer. Construction in downtown will occur during nighttime hours to avoid traffic impacts. To sign up for a weekly email with updates on the current pipeline construction schedule, visit the contact page on www.mpwsp.com.



Q&A WITH PAUL SCIUTO

GENERAL MANAGER OF MONTEREY ONE WATER



resource. The Pure Water Monterey project is in construction and expects to deliver purified water to Cal-Am Monterey customers by mid-2019.

Mr. Sciuto is responsible for the day-to-day administration of Monterey One Water and for the implementation of board policy. Mr. Sciuto served as Deputy General Manager for Monterey One Water prior to becoming General Manager in June 2015. Mr. Sciuto served as the Assistant General Manager/Engineer at South Tahoe Public Utility District for 11 years before joining Monterey One Water.

Sciuto has more than 28 years of experience exclusively in the wastewater/recycled water/potable water industry. He holds a Bachelor of Science Degree from the University of California Davis in Civil Engineering, an MBA in Finance from California State University Hayward and a Master of Science in Technology Management from George L. Graziadio School of Business and Management at Pepperdine University.

We interviewed Paul Sciuto, the General Manager of Monterey One Water (formerly Monterey Regional Water Pollution Control Agency - MRWPCA), to highlight our groundbreaking partnership in providing the Monterey Peninsula with clean, sustainable sources of water. Monterey One Water provides wastewater treatment services for the southern Monterey Bay region and is dedicated to meeting the wastewater and water recycling needs of its member agencies while protecting the environment.

The recent name change to Monterey One Water came about as a board response to increasing water demands and supply uncertainties. The board recognized treated wastewater is a valuable

[Tell us a little about Pure Water Monterey. What is the objective of this project?](#)

Pure Water Monterey is a multi-region, multi-benefit recycled water project that will ultimately inject 3,500 acre-feet of advanced purified potable water into the Seaside Basin. The project will also convert Salinas-Area agricultural runoff into as much as 5,600 acre-feet of tertiary treated water for agricultural irrigation, which will be delivered to the Castroville Seawater Intrusion Project to be used in lieu of groundwater pumping. Dr. Lucas Van Vuuren of the National Institute of Water Research in South Africa once said, 'Water should not be judged by its history,



Pure Water Monterey
A Groundwater Replenishment Project

The Future of Water is Here



but by its quality'; that quote resonates with our mission because we can clean up these waters and use them appropriately, yielding benefits for our community and the environment in the process.

How is the Pure Water Monterey project different from other water recycling projects?

This project is truly unique and frankly the only one that we know of in California, if not the country, that takes the "One Water" concept that the water industry has discussed for years and makes it a reality - the source water for this project is not only secondary treated wastewater, but also agricultural industrial wastewater, agricultural runoff, and storm water. In this way, every available source of reusable water is being utilized. Generally speaking you'll see agencies recycling wastewater, but none of the other options.

How much water does Monterey One Water process daily?

Monterey One Water currently serves a population of approximately 250,000 people and treats 17 million gallons each day. Even without the Pure Water Monterey project, the agency has been recycling water for agricultural irrigation since 1998, supplying about 14,000 acre-feet of water per year.

How does Pure Water Monterey purify the recycled water?

In addition to treating the water through the standard primary and secondary wastewater treatment processes, Pure Water Monterey purifies water in a four-step water purification facility. The water undergoes ozone pre-treatment, microfiltration, reverse osmosis, and advanced

PIPELINE UPDATES ONLINE

Folks looking for information on the pipeline installation schedule, traffic impacts and informative maps can do so by going over to the project's website www.watersupplyproject.org/pipeline. Similar information can also be found on the project's facebook page www.facebook.com/Monterey_Water. For those with any concerns or special request can call California American Water's pipeline hotline at: **831-646-3297**. All calls will be followed up with in a timely manner.

oxidation with ultraviolet light and hydrogen peroxide.

[How does this purified water compare to water from other sources, like groundwater?](#)

The water coming out of our treatment plant is far more pure than groundwater. Our treatment process will make the water near distilled quality, exceeding strict state and federal drinking water standards.

[What kinds of benefits will this project provide for stakeholders in the Monterey Peninsula?](#)

This project yields so many benefits -- it is truly unique and remarkable. It will provide a sustainable new source of drinking water

‘WATER SHOULD NOT BE JUDGED BY IT’S HISTORY, BUT BY IT’S QUALITY’

for the Peninsula and increase the amount of irrigation water for the Salinas Valley, resulting in less groundwater pumping and consequently less seawater intrusion. Currently, agricultural drainage water flows through the Blanco Drain and Reclamation Ditch and discharges into local receiving waters like the Salinas River and the Tembladero Slough.

The Pure Water Monterey project will take those impaired waters out of the environment, treat it at the wastewater treatment facility and make

the water available for agricultural irrigation. Because this runoff will be reused, it will reduce the amount of impaired waters going into the Monterey Bay Marine Sanctuary.

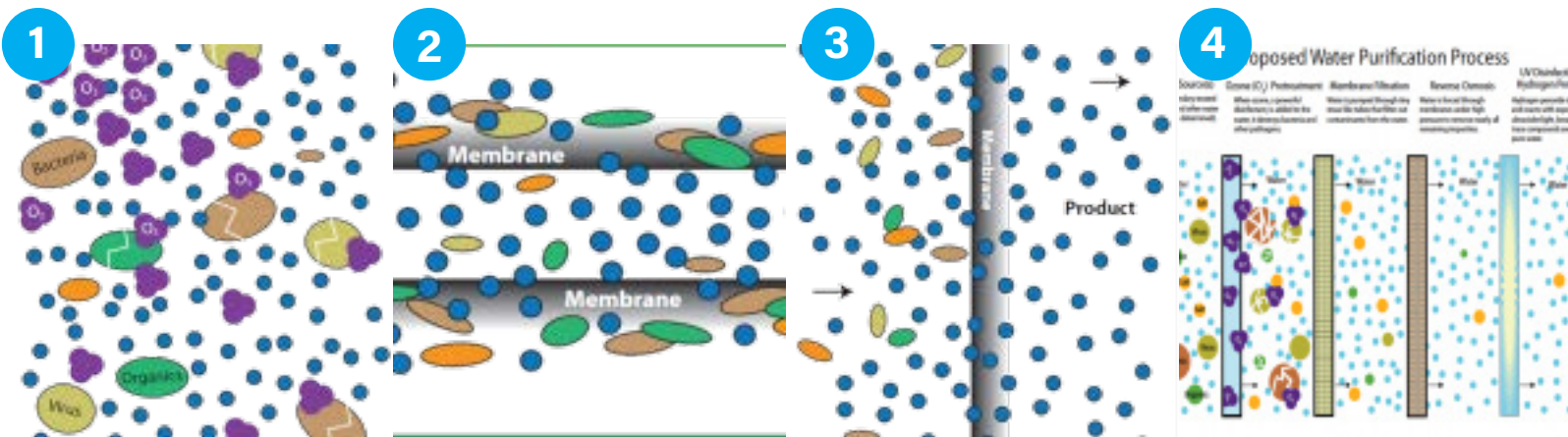
Monterey One Water has also negotiated a contract with the Monterey Regional Waste Management District to purchase landfill gas, a renewable energy, to power the advanced water purification facility, making the whole operation as environmentally friendly as possible. Sustainability has been one of this project’s guiding goals, and it benefits the interests of all of our stakeholders.

[We are officially out of the drought - why is it important that California continues to pursue options like water recycling?](#)

We still need to pursue water conservation and utilize water recycling because our state is prone to droughts. Additionally, California is a state with an increasing population and intense agricultural production, both of which require a reliable water supply. As the recent drought has taught us, there is not an unlimited source of water. We as a people need to use water wisely and re-use it where appropriate.

Monterey in particular is isolated in terms of our water access because we are not connected to a state water project; we are truly independent in our source of potable water. Yes, the Carmel River might be flowing, but there is a cease and desist order that we must meet to restore the river to its former ecological health. We must be independent in our water sources aside from whatever changes may happen in water supply and demand statewide.

WASTEWATER RECYLING BY THE NUMBERS



Step 1: Ozone Pre-Treatment

With Ozone (O_3) Pre-Treatment, Ozone, a powerful disinfectant is added to the water. It destroys bacteria and other pathogens preparing the treated water for Step 2

Step 2: Membrane Filtration

In Membrane Filtration (MF) treated wastewater is pushed through a filter with pores 300th the size of a human hair. MF is used regularly to in food production such as baby food, bottled water and beer.

Step 3: Reverse Osmosis

Water is pushed through semi-permeable membranes under high pressure. RO is the standard technology used to remove salts from seawater for human consumption. It is so effective, RO is used on the International Space Stations to make drinking water on space shuttles.

Step 4: UV & Hydrogen Peroxide

At this stage, the water is already of a high grade water quality, pure enough for public consumption. The Pure Water Monterey project, however, adds a fourth step to ensure the water's purity and definitively remove any molecules that may have slipped through. This is done by oxidizing the water with hydrogen peroxide (H_2O_2) in the presence of ultraviolet light (UV). Together, these break apart any chemical bonds that may be present. This ensures water disinfection and purity

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 Marina as the site for the proposed desalination plant.

California American Water has also secured access to and the ability to purchase permanent easements for locations to host its slant intake wells. California American Water's project will use a series of slant wells located near the coastline in the North Marina area 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.

AQUIFER STORAGE AND RECOVERY

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 and Supply Return Facilities: \$79M (26% spent to date)

Desalination Plant: \$115M (17% spent to date)

Pipeline Facilities: \$128M (30% spent to date)

Pre-Construction Cost: \$8M (100% spent to date)

*NOTE: These figures are based on a 6.4 MGD desalination facility. Pre-construction costs are included in the \$322-million project total. Further breakdown of the above components will occur after the CPUC issues a Certificate of Public Convenience and Necessity permit for the MPWSP. These figures include financing and some contingency costs and therefore differ from the capital costs listed in the settlement.



For more information on the pipeline construction schedule and traffic impacts, please visit the project's website: www.watersupplyproject.org

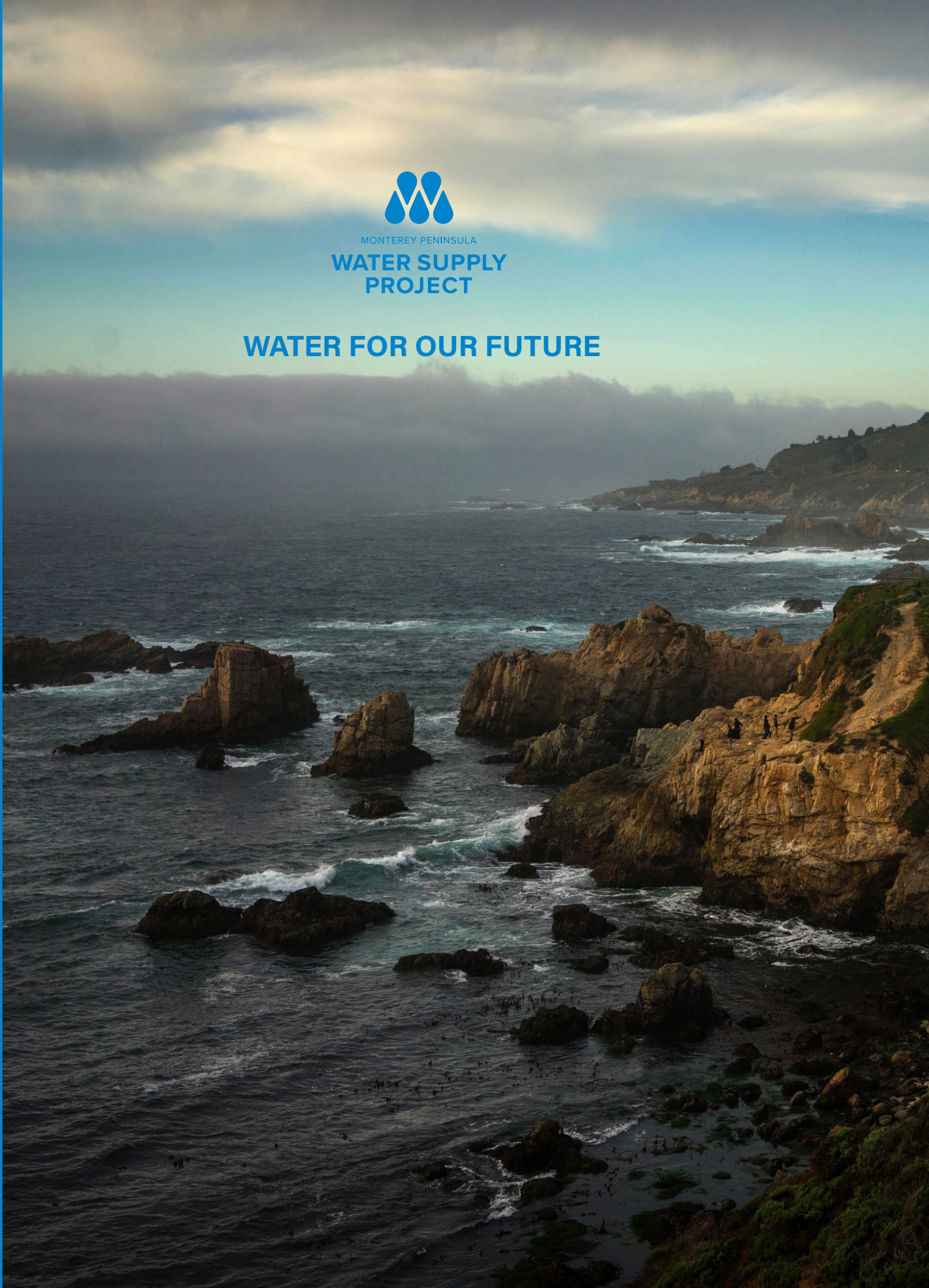
Here you will find information on where construction crews will be and when. You can also sign up to receive a weekly email with traffic alerts and general project progress.



MONTEREY PENINSULA

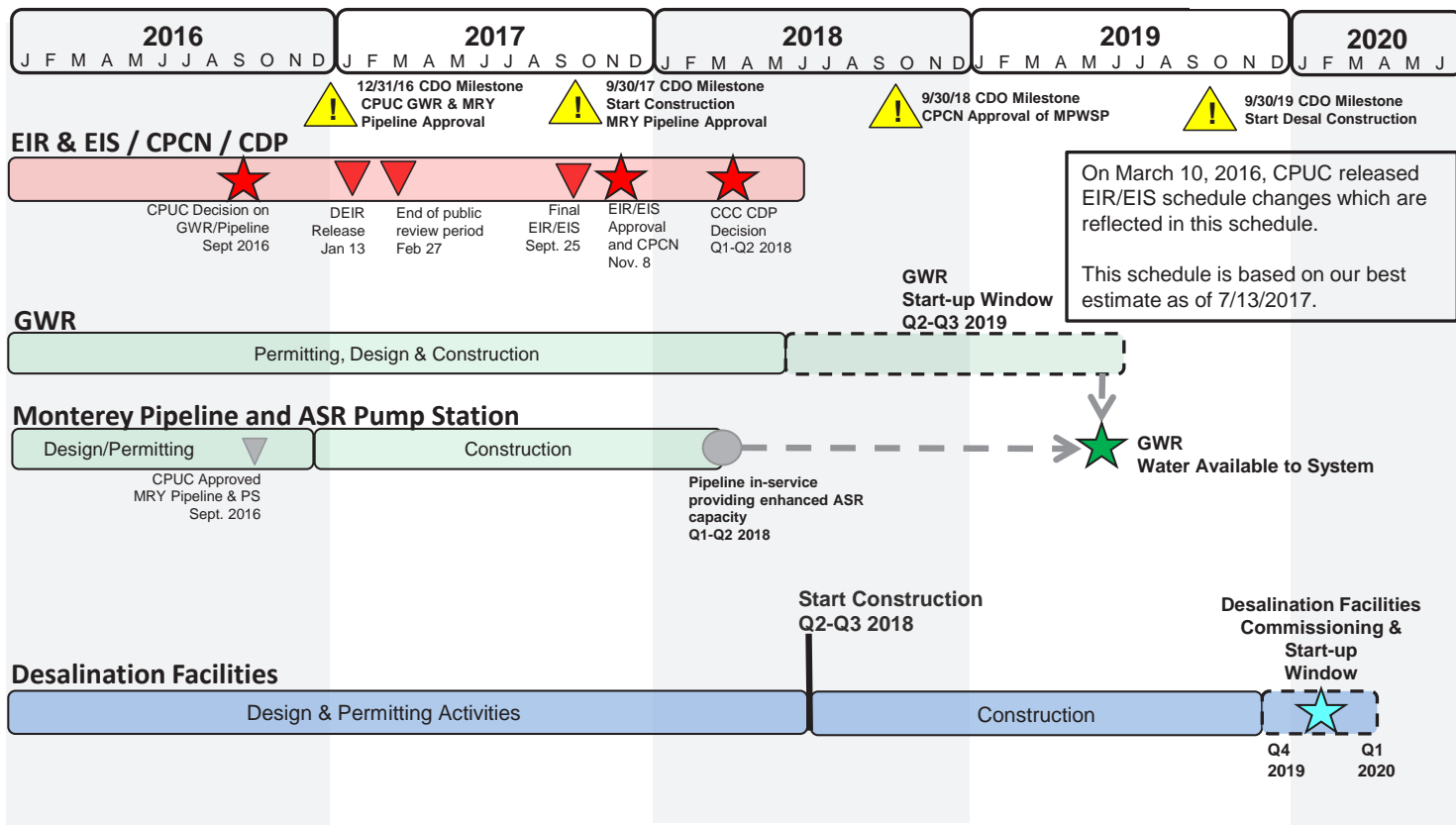
WATER SUPPLY PROJECT

WATER FOR OUR FUTURE



PROJECT SCHEDULE

MPWSP Anticipated Schedule



Note: The schedule is based on the information and assumptions available at time of update and is accurate to +/-6 months.