



MONTEREY PENINSULA
WATER SUPPLY
PROJECT

NEWSLETTER

2017/4Q

PIPELINE MOVING OVERHEAD

CREWS BEGIN HWY 68 PIPE BRIDGE CONSTRUCTION



ALSO INSIDE

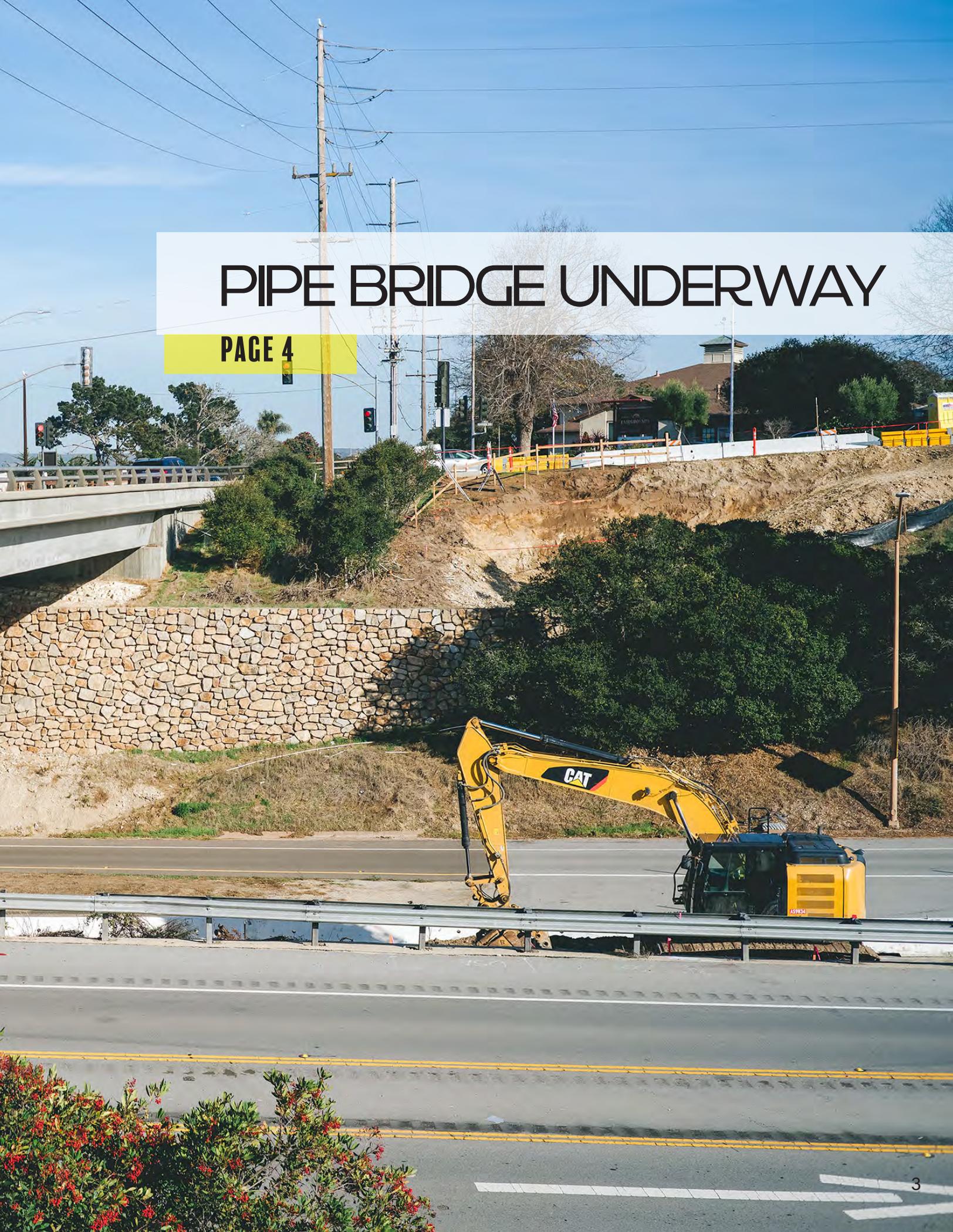
HILBY AVENUE RESTORED
UPDATED PROJECT SCHEDULE



OVERPASS ON HIGHWAY 68 WHERE THE PIPE BRIDGE IS UNDER CONSTRUCTION

PIPE BRIDGE UNDERWAY

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PIPE BRIDGE CONSTRUCTION UNDERWAY

Work began on the Monterey Pipeline pipe bridge crossing Highway Route 68. It is the only portion of the 7-mile transmission main project above ground.

The pipe bridge support the transmission pipe over the Monterey-Salinas Highway (Route 68) adjacent to the existing Mark Thomas Drive bridge crossing near the Monterey County Fairgrounds. The pipe bridge is designed to visually complement the Mark Thomas Drive road bridge.

Under construction currently are the side abutments and center column that support the bridge's superstructure. The structurally engineered supports are built by drilling 40-foot deep holes that are then filled with rebar and concrete.

Perhaps the most impressive part of this project segment is the pair of 125-foot long concrete pre-engineered and constructed girders that will serve as part of the bridge's superstructure. Constructed in Lodi, the girders are made of reinforced high strength steel and concrete. The massive girders will be transported to the Peninsula where a crane will orchestrate the installation onto the support array.

The pipe bridge design was presented to the Monterey City Council and the public for input and adjusted to accommodate the community's concerns about its aesthetics. Originally proposed as a steel-trussed bridge, which both Caltrans and the City of Monterey found incompatible with the scenic nature of the highway.

“Perhaps the most impressive part of this project segment is the pair of 125-foot long pre-engineered and constructed concrete girders.”

The modified and approved concrete bridge design features an architectural lip that makes it visually consistent with the current overpass.

A variety of pipeline routes were evaluated in the MPWSP planning process, with the current pipeline route and bridge over Monterey-Salinas Highway proving to be the most viable option. The anticipated construction cost for the pipe bridge is \$3 million including the additional aesthetic elements. Construction of the pipe bridge began in October and is expected to be complete by March 2018.

PIPELINE UPDATES ONLINE

Folks looking for information on the pipeline installation schedule, traffic impacts and informative maps can do so by visiting 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. 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.

WATER FOR OUR FUTURE



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MPE

HILBY AVENUE RECONSTRUCTION COMPLETE



STREET MADE NEW AGAIN FOLLOWING INSTALLATION

“I’ve been impressed with the work that both CalAm and Garney have done” - Tim O’Halloran



F For the last year, construction crews have steadily progressed through peninsula’s coastal cities installing the 7-mile long, 36-inch wide pipeline. The affected portion of Hilby Avenue in Seaside experienced some of the most prolonged and disruptive stretches of construction.

The street, which was already showing its age before pipeline construction began, is now nearing completion of total new road reconstruction. This new road will provide the City of Seaside and its residents with a new, much-improved roadway than before the project started and replete with new ADA compliant curb ramps.

Reconstruction of the more than mile-long portion of Hilby Road involved multi-layers of complex construction. The first step was to employ a recycling method that pulverized the existing road surface into a sand-like material to use later as the founda-

tion to build the new street.

Before laying down the base layer of asphalt, crews had to adjust utilities in streets for the new road. Paving was finished in January and new street markings are now being applied. The entire project is expected to be completed the second week of February - weather permitting.

The street project required complex coordination and cooperation between California American Water, its contractor Garney Construction, the City of Seaside and other municipal agencies.

“I’ve been impressed with the work that both CalAm and Garney have done,” said Tim O’Halloran, the project coordinator for Harris and Associates on behalf of California American Water. “It’s been very professional. California American Water does an amazing job of keeping up with things.”

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.

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*

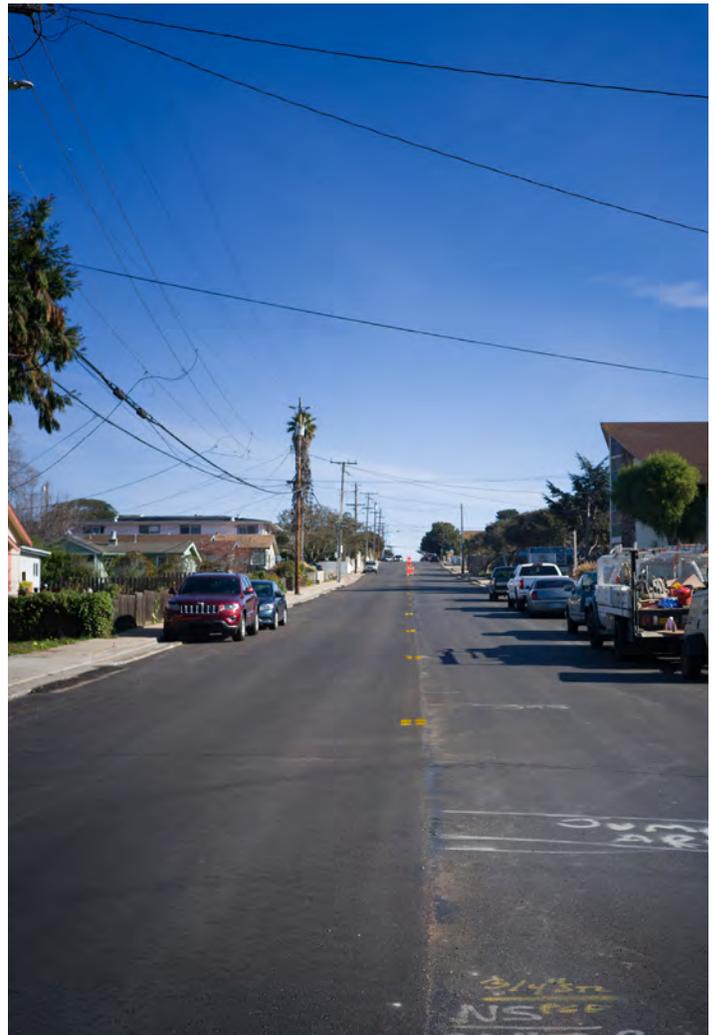
Subsurface Intake System and Supply Return Facilities: \$79M (27% spent to date)

Desalination Plant: \$115M (18% spent to date)

Pipeline Facilities: \$128M (37% 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

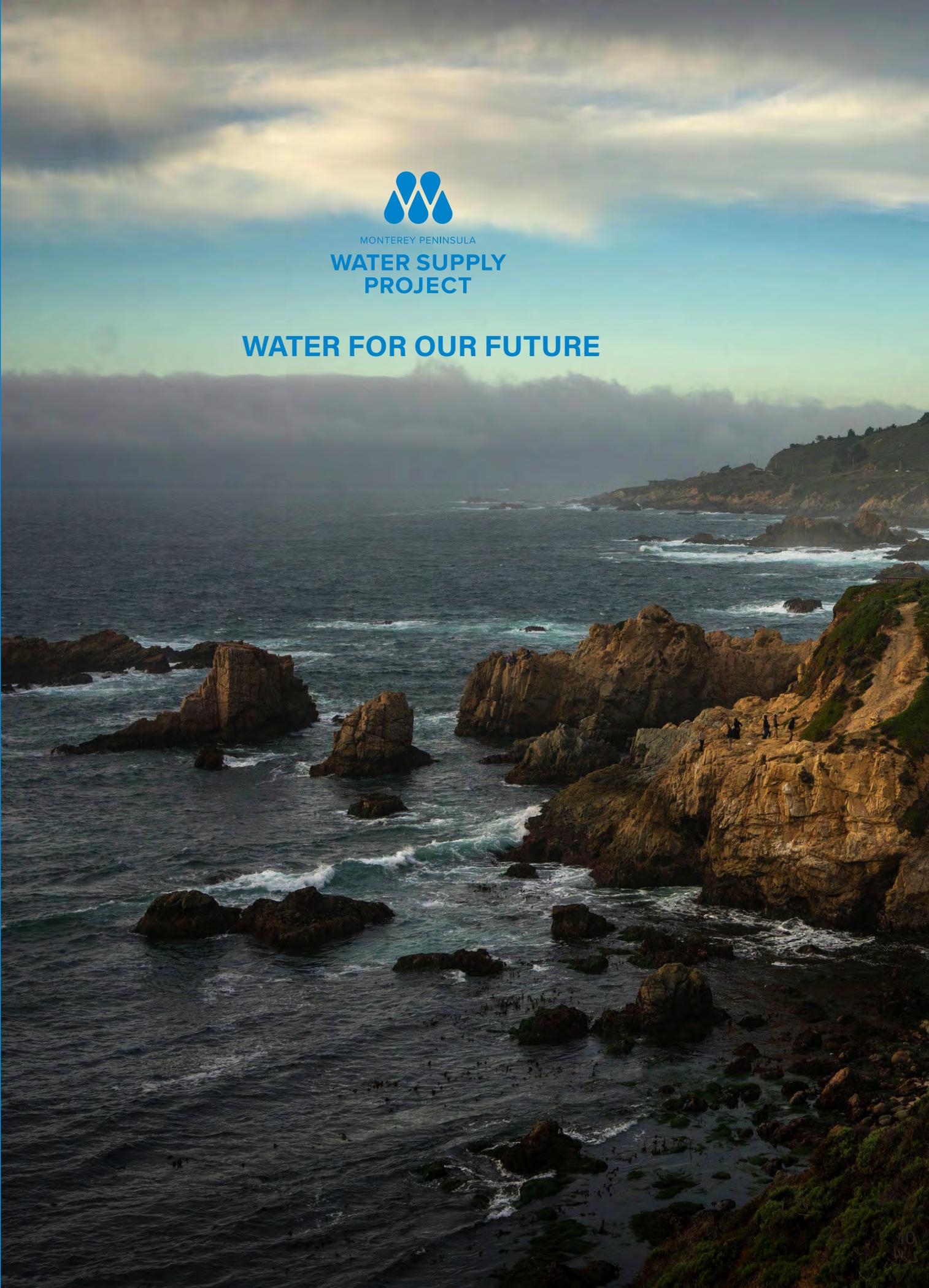
Here you will find information on where construction crews will be and when. You can also sign up to receive a weekly email with traffic alerts and general project progress.



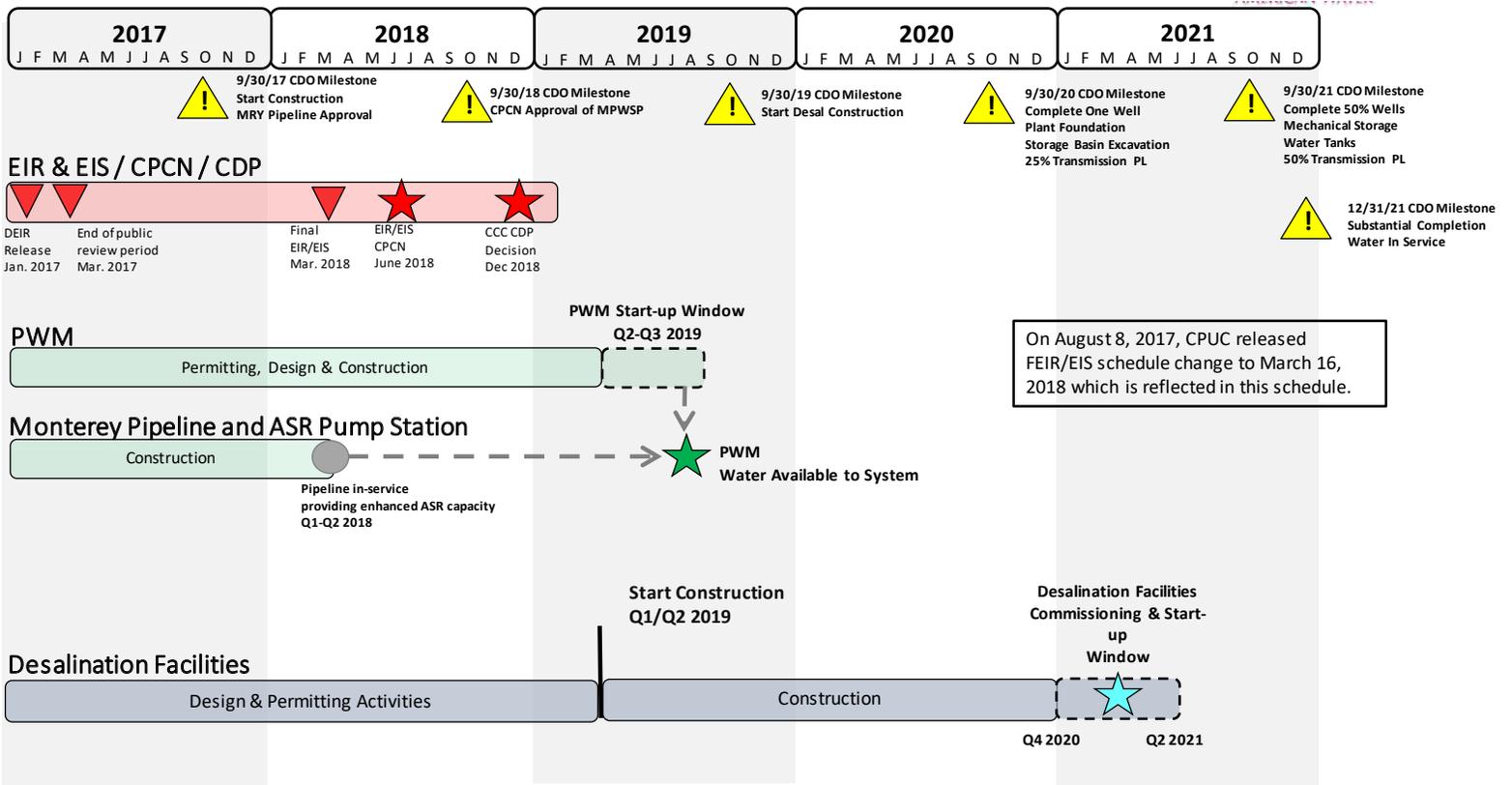
MONTEREY PENINSULA

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PROJECT SCHEDULE



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