

MONTEREY PENINSULA WATER SUPPLY PROJECT

PROGRESS REPORT

April 30, 2016



Updated Request to Postpone River Cutbacks Submitted

*Proposal Finds New Water Supplies to Offset and Reduce River Diversions
Until Desalination Project Comes Online*

This week, a coalition of stakeholders, including California American Water, the Monterey Peninsula Regional Water Authority, Monterey Peninsula Water Management District, Pebble Beach Company and the City of Pacific Grove, submitted a revised request to the State Water Resources Control Board seeking more time to develop alternative water supplies for the communities of the Monterey Peninsula before significant cutbacks on pumping from the Carmel River take effect.

The need to further extend the deadline on river cutbacks arose last month after the California Public Utilities Commission (CPUC) announced a new, one-year delay in their environmental review of California American Water's proposed Monterey Peninsula Water Supply Project, which is designed to replace current diversions from the Carmel River. In 2009, the State Water Resources Control Board issued a Cease and Desist Order on Carmel River pumping that included an aggressive cutback schedule. The river, which has long served as the primary water supply for the Monterey Peninsula, is considered critical habitat for protected species of fish and frogs.

The new modification request seeks to postpone the most significant river cutbacks by five years and lays out a plan to reduce river pumping in the meantime by nearly 4,800 acre-feet, approximately 80% of the state's total cutback goal.

"This modification request represents a **monumental coming together of diverse groups**. We have prominent environmental and business groups agreeing on how to balance the needs of the environment and the community. I'm pleased to have played a part in building this consensus. I grew up catching tadpoles and stickleback minnows in the Carmel River, so it is particularly meaningful that, on my last days as mayor, we have developed **a win-win plan for returning water to the river and protecting the needs of the community**," said Monterey Peninsula Regional Water Authority president Jason Burnett. "Steinbeck said the Carmel River had everything a river should have, but for many years it lacked water. Because of the contributions of so many, the river is well on its way to once again having more water, too."

The new sources of supply outlined in the request that will serve as a “one-to-one” offset for current pumping on the river includes the following:

- The development of recycled water through the Monterey Peninsula Water Management District and Monterey Regional Water Pollution Control Agency’s Pure Water Monterey Project, which is projected to start delivering recycled water to Monterey Peninsula residents in as little as 24 months pending CPUC approval
- Increased storage of Carmel River excess winter flows in the Seaside Basin
- A new agreement to compensate a national conservation organization for curtailing Carmel River usage by approximately 300 acre-feet a year

The water savings achieved by this agreement would begin this year and are expected to add in excess of 1,000 acre-feet of water to the river before California American Water’s desalination plant is complete and serves as a permanent replacement for its diversions.

“The forbearance agreement California American Water has reached will put a significant amount of water back into the Carmel River during this critical period,” said California American Water president Rob MacLean. “This, along with the commitment by multiple groups and agencies to move Pure Water Monterey along as quickly as possible, has managed to **unite the stakeholders engaged before the state board on the Carmel River issue** – even those who had objected to our previous modification request on the grounds that its diversion limit was too high.”

The Planning and Conservation League and Sierra Club, two parties that have fiercely advocated for reductions in California American Water’s pumping from the Carmel River, had protested the previous modification request which sought to lower California American Water’s diversion limit to 8,310 acre-feet a year until the desalination project came online. Those groups have now signed on to support the new request, given the significant pumping offsets that have been developed.



“The Planning and Conservation League and the Sierra Club had previously expressed concerns to the State Water Resources Control Board about an extension to the Cease and Desist Order deadline,” said Jonas Minton, water policy advisor for the Planning and Conservation League. “We are now excited to see the accelerating progress on alternative water supplies and on this basis, support the request for a time extension to the CDO.”

In addition to support from environmental groups, the proposed CDO modification has also met with approval from local business groups.

“A lot of effort has gone toward finding a compromise that responds to the need to decrease pumping on the river and ensures that, with continued conservation efforts, our local economy is not unduly impacted,” said John Narigi, vice-chair of the Coalition for Peninsula Businesses. “We believe this proposal strikes the right balance.”

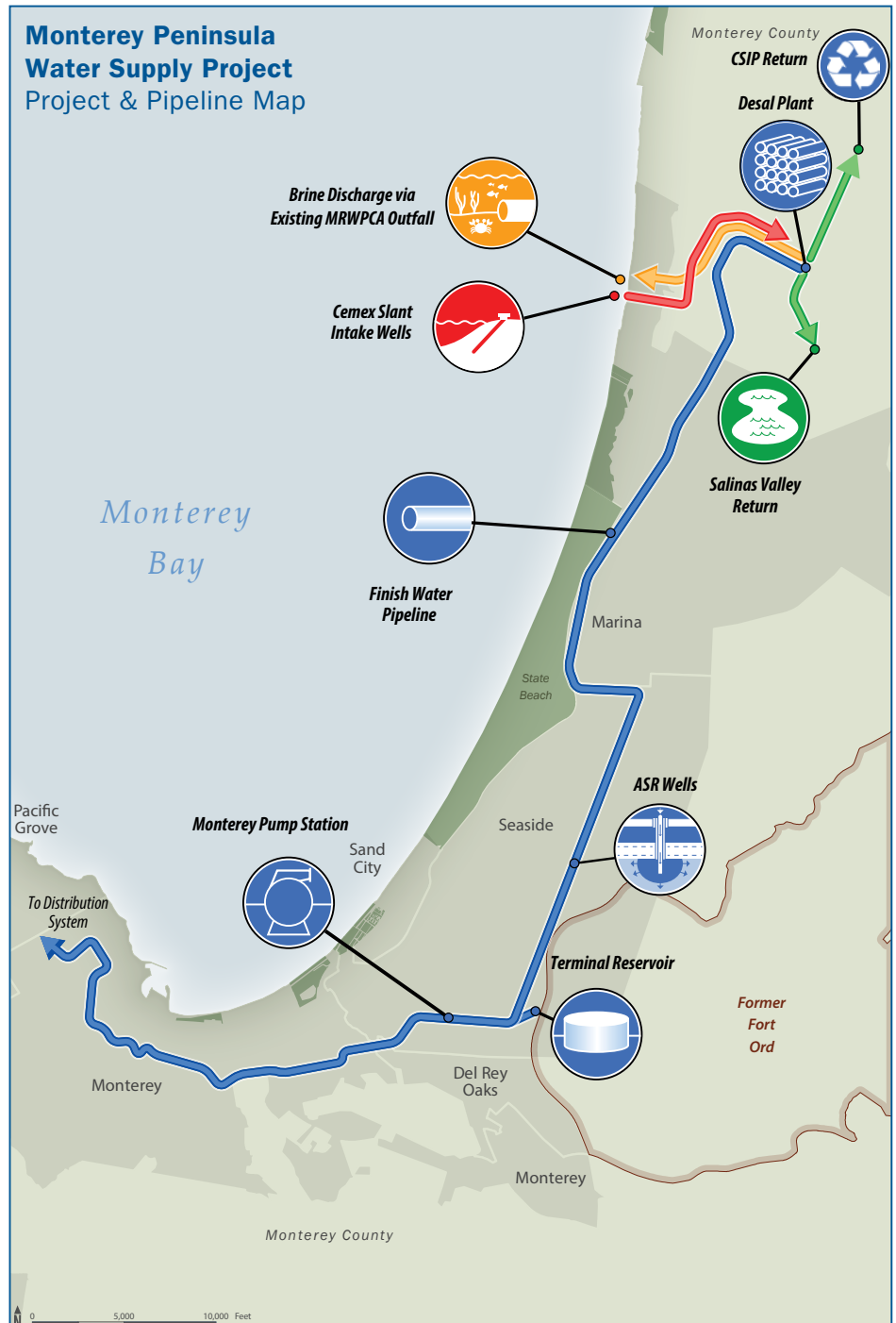
The State Water Resources Control Board is expected to set a hearing on the modification request this summer.

CPUC Delays Desalination Project Environmental Review; Considers Supporting Cal Am's Request for Modification of CDO Deadline

The California Public Utilities Commission pushed back the release date of a Draft Environmental Impact Report/Environmental Impact Statement on the Monterey Peninsula Water Supply Project until December 2016, delaying anticipated certification of the report until late 2017. The effective year-long delay was needed, the CPUC said, due to a longer-than-expected process to conduct a third-party review of Geoscience Support Services' hydrological model after potential conflict-of-interest issues emerged with the firm last year. The agency also cited the effort to combine federal- and state-level environmental review of the project as contributing to the delay.

At a recent prehearing conference, CPUC Commissioner Catherine Sandoval said that in light of the most recent delay, the CPUC would vote on a resolution to send to the California State Water Resources Control Board supporting an extension to the existing cease-and-desist order against Cal Am. The current CDO imposes limits on Cal Am's withdrawals from the Carmel River, which represents more than half of the community's current water supply.

The CDO, which took effect in 2009, incrementally decreases the amount of water that can be produced from the Carmel River basin each year. Through robust conservation efforts, the Monterey Peninsula community has managed to stay below the limits, including the incremental cutbacks that have already occurred to date. But at the end of 2016, the CDO kicks into high gear and mandates a nearly 6,000-acre foot reduction in allowable withdrawals, which further conservation efforts will not be able to overcome. It is hoped that through demonstrable conservation results and the recent progress that has been made in developing a new water supply portfolio, the State Water Resources Control Board will grant a qualified extension of the deadline in order to provide adequate time to finish the Monterey Peninsula Water Supply Project.



The CPUC is scheduled to approve the recycled water component of the project, known as Pure Water Monterey, this summer. Pure Water Monterey is a partnership between the Monterey Regional Water Pollution Control Agency and the Monterey Peninsula Water Management District to recycle wastewater through an advanced treatment process. If approved, the \$85-million project would **create up to 3,500 acre-feet of water per year for the Peninsula** and would allow California American Water to reduce its pumping from the Carmel River basin by that same amount.

California American Water and 17 other parties to the CPUC proceeding recently requested the CPUC expedite its approval of the Water Purchase Agreement for Pure Water Monterey and allow California American Water to proceed next year with construction of an expanded pipeline through residential and commercial areas of Seaside, Monterey and Pacific Grove that is needed for the recycled water to be conveyed to customers. Among the parties making this request were the County of Monterey, the Monterey Peninsula Regional Water Authority, Marina Coast Water District, LandWatch Monterey County, Monterey County Farm Bureau, Public Water Now, Office of Ratepayer Advocates, Salinas Valley Water Coalition, Sierra Club and the Surfrider Foundation.

In a recent ruling, Commissioner Sandoval wrote that while the delay to the project EIR/EIS was regrettable, it will in the longrun ensure a stronger review process that will better stand up under legal scrutiny.

Carmel Lagoon





As Mayor of Carmel-by-the-Sea, Jason Burnett has served for the past four years on the Monterey Peninsula Regional Water Authority (MPRWA), most recently as board president. Now retiring from his position as Mayor, Burnett looked back with us on some of his accomplishments related to water, as he prepared for his last MPRWA meeting in April 2016. Burnett has been widely recognized for his in-depth understanding and leadership on local water issues. The Carmel Pine Cone called Burnett “a miracle worker” for the water progress made under his watch. He has testified before the California Public Utilities Commission and participated in national news media interviews on the topic. Below is a record of our conversation.

Q. What accomplishments are you most proud of during your tenure on the Monterey Peninsula Regional Water Authority?

There are essentially two things: first, that we’ve been able to build consensus around a solution for water on the Monterey Peninsula that once implemented will serve our community well for many decades. Building a broad coalition that included very diverse groups – from environmental to agricultural, to ratepayer groups to business and government – was a moment in time when we were able to develop a path forward, not dependent on any one party or individual, and we’ve been able to stick with it.

The second is that we’ve figured out a way to think and act regionally about water, such that in the process of solving our issues, we will also solve the community of Castroville’s supply shortage for at least a generation. We will add water to the CSIP program and collect storm water and wastewater from the Salinas Valley that needs to be cleaned up, and actually help to address water quality challenges in the Salinas Valley at the same time we address water quantity issues on the Peninsula. The portfolio approach we’ve adopted delivers benefits throughout a good portion of the county, which is the reason why so many stakeholders want to see the Monterey Peninsula Water Supply Project be successful – because it accomplishes broad regional goals in addition to its primary purpose of creating a sustainable water supply for the Peninsula.

Q. What do you think should be the primary focus of MPRWA and the community going forward?

We’ve had success because we’ve been focused on one thing: a sustainable water supply at a feasible cost. A key challenge going forward will be keeping this focus because there will be pressure to expand into other areas. It will be important to deliver on the plan we have in place. There will be a lot unexpected events and unanticipated details that will need to be worked through. Keeping one’s eye on the ball and going back to the original settlement agreement and the other subsequent agreements, and making sure we stay true to those will be critical. It will be important to remain pragmatic and understand that being successful means finding a win for all stakeholders. We’ve done a good job of adding to the winners. The community of Castroville is a good example of this and is now invested in seeing this project through. One community we worked hard to find a win for was the City of Marina and we need to do more work in this area. We really want the project to be something they will be happy with, and so far we have yet to figure that out.

Q. Historically, what do you think have been the greatest obstacles and challenges to solving our local water problems?

It’s a lot easier in life to say no than yes. Nothing is perfect. If you’re always comparing the option at hand to the ideal, the option at hand always comes up short. In the past, there’s been a willingness to pass on

options that had imperfections in hopes of finding something better. The current plan is by no means perfect and if we had ten more years to work on it we could improve it, but we don't have ten more years. The Cease and Desist Order, frankly, brought us all together to find what is doable and not to let the perfect be the enemy of the good. The other historic dynamic has been that of the size of the plant and land use concerns. Both sides of this debate have been willing to walk away in the past, both those who want to facilitate growth and those who wish to restrict it and who saw water supply as a way to enact their land use preferences. That debate hasn't gone away, but we tried to strike a middle ground this time around. At some point, you have to pick up a shovel and start building.

Q. During your time on MPRWA, the 2013 settlement was reached among 16 parties to the project application and the Authority developed a set of conditions to support a water project, which incorporated much community input. What have you learned about bringing together disparate groups on difficult issues?

It takes time and careful attention to process and making sure you don't try to short circuit the process. It takes being clear about what the goal is, without getting too stuck in the details. Leading up to establishing the Water Authority's conditions, we commissioned a third-party study and that enabled us to have an objective view. We made a sizable investment in taxpayer dollars to have that review conducted because it allowed us to engage at the CPUC and argue for the eight conditions we established. The conditions covered a range of issues from risk mitigation to ratepayer and environmental protection. We were careful not to be too narrowly focused or overly restrictive in these conditions so we could have the flexibility to work with other parties in settlement discussions, which eventually led to an agreement that fully met all eight. In many ways that was just the beginning of our work. We needed special legislation, which was carried by Senator Bill Monning with the assistance of Assemblymember Mark Stone, the Monterey Peninsula Water Management District and ultimately, the Governor, to carry out our conditions. In the end, it was money well spent. The savings were far larger than the original investment.

Q. If you could deliver one message to residents of the Peninsula about our water situation what would it be?

Residents have done a great job conserving water, but need to understand that while we may have gotten rain this winter, we need to keep up the good work. We're still under the Cease and Desist Order. If we are successful in getting a revision to that order, the expectation is that we'll be held accountable for keeping our consumption at a low level until the supply projects come online. We're dealing with a regulatory drought on the Monterey Peninsula and because of this, will need to continue to lead the state and the country in water conservation.

Coastal Commission Approves Test Well Repair

The California Coastal Commission approved Cal Am's application to repair a portion of the slant test well discharge pipe that was broken in early March during the heavy storms that scoured the Peninsula's coast.

The pipe initially became exposed during winter storms that eroded over ten feet of sand depth at the shoreline. The ensuing and prolonged heavy wave activity eventually washed away the sand covering the Monterey Regional Water Pollution Control Agency's ocean outfall vault and the test well pipe connected to it. In anticipation of more storms and as a precautionary step, the test well was then shut down. The pipe did eventually give way under the extreme loads of the storm.

"Unfortunately, this is the only structure we can connect our outfall pipe to," said Ian Crooks, California American Water's lead engineer on desalination project. "We just had the unfortunate luck of having this operate during a historically strong storm season. But with the Commission's approval now in hand, we will quickly repair and secure the pipe and hope to have the test well up shortly."

Crooks estimated a total of two to three days of repair work to fix the pipe and said the damaged pipe represents a very minor setback within the context of the project's timeline.

"We already have a large body of comprehensive data that the test well has produced thus far," Crooks said. "That data that is sufficient to complete the modeling work needed for the EIR. Any further data produced by the well of course is helpful but would also be at this point largely supplemental."

Test Slant Well



About the Project

The Monterey Peninsula is facing a severe water supply problem. That's because the State Water Resources Control Board (SWRCB) 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 (ASR)**
- **Pure Water Monterey: A Groundwater Replenishment Project (GWR)**

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 allows 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. Depending on the availability of water from the GWR project, the desalination plant will be sized at either 9,750 acre-feet per year (afy) or 6,250 afy. One acre-foot is equal to one acre filled with a 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 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.

**South-Central California
Coast Steelhead Trout**



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.

PURE WATER MONTEREY: A GROUNDWATER REPLENISHMENT PROJECT

The proposed Pure Water Monterey project, a partnership between the Monterey Regional Water Pollution Control Agency 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.



Budget: Major Portions of the Project

Subsurface Intake System and Supply Return Facilities: \$79M (23% spent to date)

Desalination Plant: \$115M (13% spent to date)

Pipeline Facilities: \$128M (12% spent to date)

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

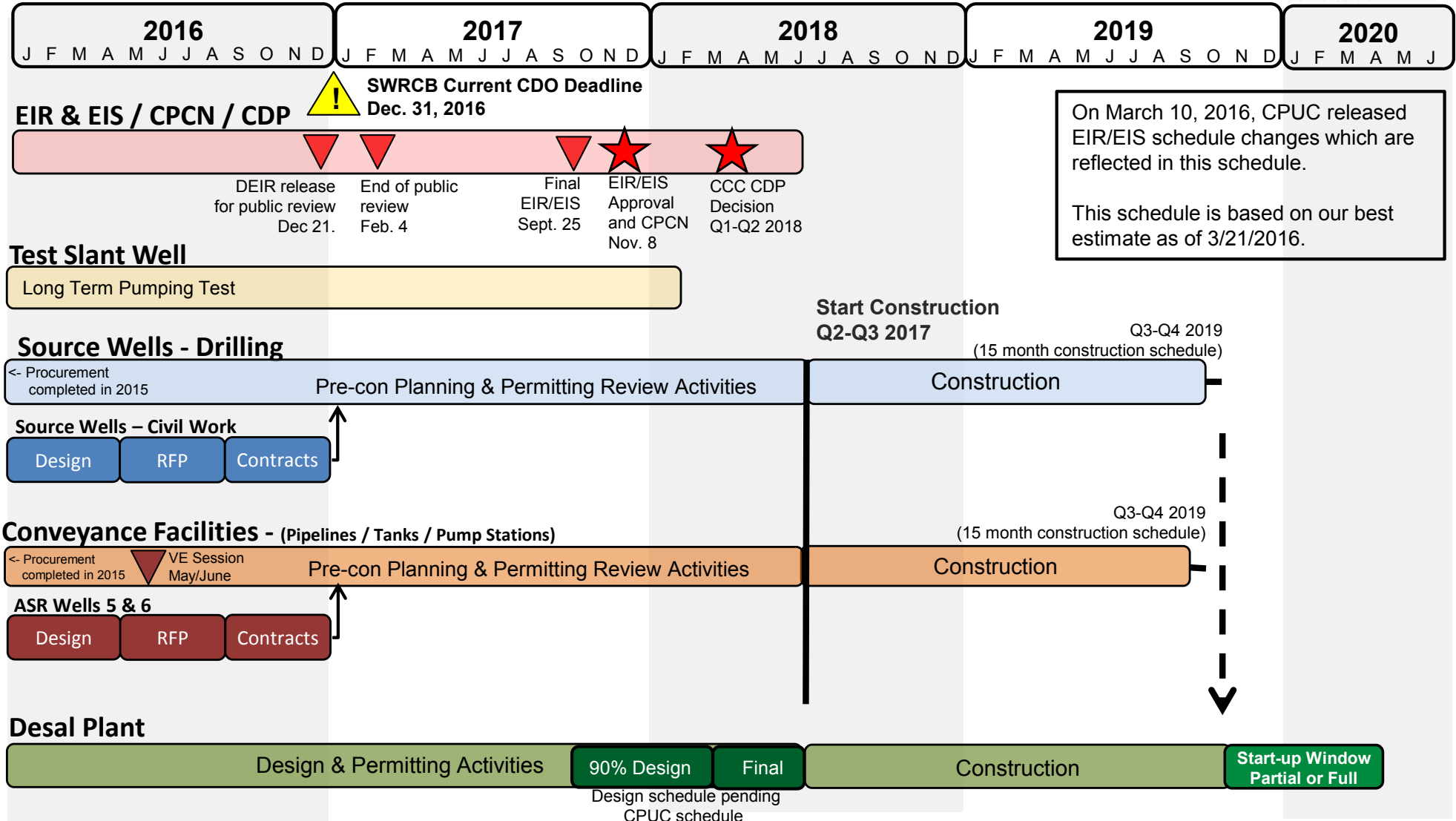
***NOTE:** These figures are based on a 6.4 MGD desalination facility. Pre-construction costs are included in the \$322-million project total. Further breakdown of the above components will occur after the CPUC issues a Certificate of Public Convenience and Necessity permit for the MPWSP.*

** These figures include financing and some contingency costs and therefore differ from the capital costs listed in the settlement.*

Timeline

Below is a timeline depicting the major components of the project and their expected delivery dates.

MPWSP Anticipated Schedule



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

Updated 3/21/2016