

STAFF REPORT

To: Coastside County Water District Board of Directors

From: Mary Rogren, Assistant General Manager

Agenda: December 12, 2017

Report

Date: December 8, 2017

Subject: Assistant General Manager's Report

Recommendation: none

Background:

Advanced Metering Infrastructure (AMI) – Installations

AMI installations are continuing to progress on schedule. As of this writing, Professional Meters Inc. (PMI), the District's contractor, has installed over 1,000 meters to date, and should have another 900 meters installed before the Christmas holidays. All installations should be completed by April, 2018.

In addition to (2) mailings, e-newsletters, and newspaper notices, the District has expanded its outreach to include email notices to customers 1-2 weeks in advance of installation. Meter installations have proceeded smoothly particularly due to our Staff's ongoing oversight as well as careful staging of meter inventory and supplies for the contractor.

District Staff now has access to 24 meter reads per day for every meter on the Aclara AMI network, and already our Staff is utilizing the AMI data to explain high usage to customers. Below is an example of data that is now available to Staff in the Aclara system. In this example for a residential customer, the graph shows that usage never goes below 8 gallons per hour, and has recently grown to 10 gallons per hour. Generally, we can expect usage for a residential customer to go to zero at some time during the day, so this constant usage could indicate a

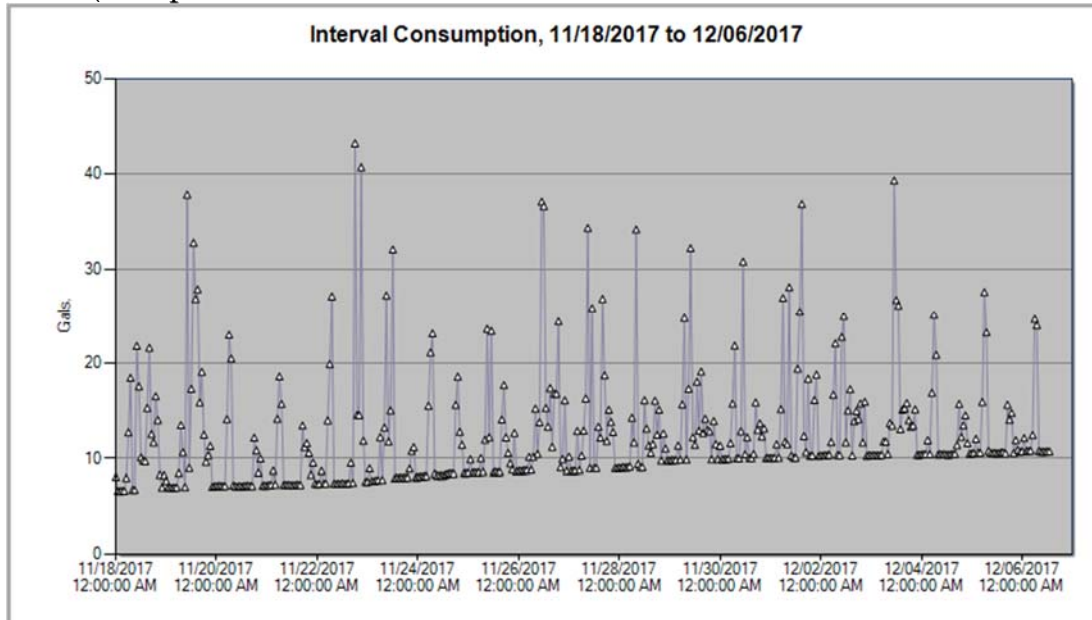
STAFF REPORT

Agenda: November 14, 2017

Subject: AGM Report

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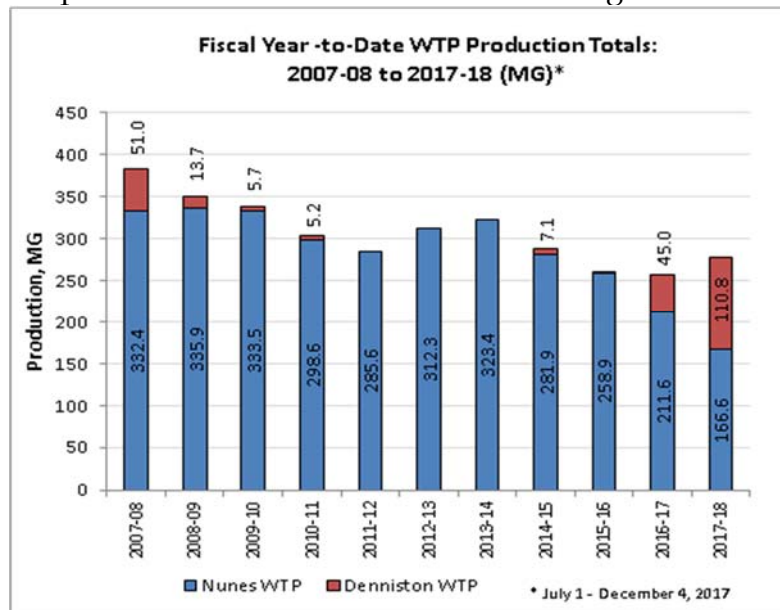
leak. (This particular “leak” could result in an additional \$200 on a water bill.)



Update on Capital Projects

As we approach mid-year, we would like to highlight some of our accomplishments on the capital improvement front.

Specifically, we would like to highlight the near completion of the Denniston Booster Pump Station and Bridgeport Pipeline project (\$2.8M.) Our recent production report shows the benefits we are realizing from our investments



in the Denniston infrastructure. As shown in the graph, we have been able to take 111 MG from Denniston fiscal year-to-date compared to minimal usage historically. On a calendar year 2017 basis, we will end the year at 200 MG taken from Denniston. Given the price of SFPUC water at \$5K per 1 MG, the District will save \$250-500K+ in SFPUC water purchases annually (in non-drought years) given our recent improvements.

Other notable accomplishments include completion of the:

- El Granada Tank #3 Recoating Project (\$.9M)
- Strawflower Pipeline Replacement (\$.2M)
- Highway 92 Pipeline Replacement at La Nebbia (\$.1M)

Projects currently “in process” include the replacement of 2-inch galvanized pipe in downtown Half Moon Bay as well as the Advanced Metering Infrastructure roll-out.

WSIP

Attached is the annual SFPUC newsletter on “WSIP in Review.” At a recent BAWSCA meeting, SFPUC reported that the \$4.8 Billion WSIP project is 95% complete. The Calaveras Dam Replacement Project is projected to be completed by mid-2019.



Note from the Director

We have continued to make excellent progress towards completion of the Water System Improvement Program (WSIP) this past year. As of June 30, 2017, the WSIP is almost 95 percent complete. With every hour worked in the field, we move one step closer to achieving the Level of Service (LOS) goals set out at the beginning of the program: to ensure seismic and delivery reliability, meet water quality requirements, and achieve water supply goals in a sustainable manner, especially during extended drought periods. And, of utmost importance, we continue to work safely on our projects. Since 2008, we have completed over 9 million working hours, with an incident rate that is less than half of the national industry average.

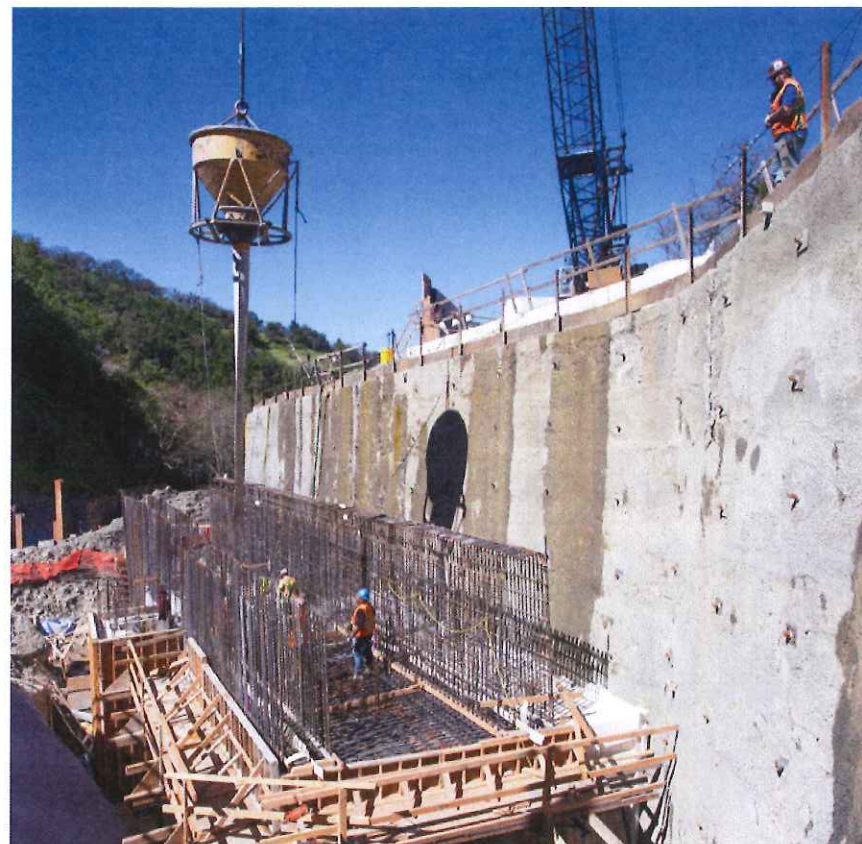
This newsletter is an opportunity to reflect on important milestones achieved this year and celebrate the dedication and hard work of the hundreds of individuals, including our many stakeholders, who have contributed to the overall success of the WSIP.

We look forward to continuing this important work as we move towards completion over the next two years and continue serving our 2.7 million customers who rely on the Hetch Hetchy Regional Water System every day.

Sincerely,



Daniel L. Wade, P.E., G.E.
Director, Water Capital Projects and Programs
Infrastructure Division



Concrete work for the new intake and conveyance structures upstream of the Alameda Creek Diversion Dam.

Construction underway for the Fish Passage Facilities within the Alameda Creek Watershed

Construction began in April 2016 for the Fish Passage Facilities within the Alameda Creek Watershed. The Calaveras Reservoir collects water from Alameda Creek by means of the Alameda Creek Diversion Dam (ACDD) and the 1.8-mile-long Alameda Creek Diversion Tunnel, in addition to collecting water from other streams that flow directly into the Reservoir. The project will allow the SFPUC both to construct a fish ladder around the ACDD for upstream and downstream migration, and to improve operational functionality of the existing ACDD. This important work will support restoration of steelhead trout to the Alameda Creek Watershed.

In 2017, major construction on the fish ladder and the intake structure is underway, along with the installation of a permanent power supply, a communications system, and other ancillary facilities. As of June 2017, the project is more than 40% complete and construction completion is anticipated in Fall 2018.



Crews hydroseed the hillside as part of the habitat restoration work.

Peninsula Watershed Native Habitat Is Revived Along Popular Sawyer Camp Trail

The SFPUC has successfully converted 22 acres of watershed land to native habitat over the summer and fall of 2016. For purposes of public safety, the work required a three-month weekday closure of an adjoining 2-1/2-mile midsection of the popular Sawyer Camp Trail. During the weekday closures, crews removed non-native, invasive, acacia trees and other weedy vegetation that over the years had choked out and displaced the original meadows and oaks.

The San Mateo County Parks Department supported the effort throughout, our crews worked extra hours to reopen the trail on time, and returning users are enjoying the emerging native grasses and the restored look. The work along the Sawyer Camp Trail is part of a long-term project at about 180 acres of watershed sites to bring back, enhance, and maintain native oak woodland and grassland habitats and the many plant and wildlife species that depend on them. The project compensates for impacts to habitat from WSIP projects elsewhere in the watershed.

WSIP Shows Industry Leadership with Awards and Honors

Since 2010, the WSIP and its project teams have been honored to receive 55 prestigious industry awards. Below are some of the award highlights over the last year:



• The Harry Tracy Water Treatment Plant-Long Term Improvement Project-11 MG Treated Water Reservoir Project:

- Honor Award of Engineering Excellence from the American Council of Engineering Companies (California & National)



• The New Irvington Tunnel Project:

- APWA Northern California Chapter's "2016 Project of the Year" award
- American Society of Civil Engineers (ASCE) 2016 San Francisco Section - Outstanding Construction Project of the Year Award



• The Bay Division Pipeline Reliability Upgrade-Tunnel (aka Bay Tunnel) Project:

- 2016 Engineering Excellence" award by the American Council of Engineering Companies (ACEC).
- 2016 Project of the Year award by the American Society of Civil Engineers (ASCE), Region 9





These stag moose fossils were found by the SFPUC construction team at the Hayward Fault near Highway 680 and Mission Boulevard in Fremont.

Partnering with the Children's Natural History Museum of Fremont

Last summer the Children's Natural History Museum in Fremont placed Ice Age Fossils found at a WSIP project site in Fremont on display. The fossils were found by our construction crews during excavation on the Seismic Upgrades of Bay Division Pipeline Nos. 3 and 4 project. Due to extensive training for such an eventuality, crews stopped construction work while paleontologists were dispatched to unearth fossils of more than 50 specimens, including bison, horse, elk, camel, deer, brush rabbit, deer mice, and pocket gophers, from 12,000 years ago.

The SFPUC is delighted to have found such an excellent partner in the Children's Natural History Museum of Fremont, which is one of the few places in the Bay Area where children can actually touch pieces of the fossil history of the East Bay. The entire collection was donated to the Museum. Stop by and visit these fossils yourself. Learn more at: <http://cnhm.msnucleus.org>.

Thirteen Regional Groundwater Wells near Completion

The Regional Groundwater and Storage and Recovery (GSR) Project is now over 70% complete. Crews have nearly finished the construction of all 13 Phase 1 wells in locations throughout San Mateo County. This year's work involved installing well pumps, hot tapping to the existing transmission lines, and construction of the well buildings and pad sites. Moving forward, these wells will be fully tested to make sure they are operational before being brought online.

Phase 2 of the project will involve the construction of two additional well sites to fully meet the level of service goals and objectives for the project. In Fall 2017, we will drill up to three test wells to help evaluate potential locations for the Phase 2 wells. The final project is anticipated to be complete in 2019. The GSR project will allow the SFPUC and our regional partners to operate the groundwater basin in a sustainable manner and provide a new 20 billion gallon dry year groundwater supply to customers. For more information, please subscribe to our blog www.sfwater.org/Peninsula.



Centennial Trail, in South San Francisco on Huntington Avenue, is one of 13 well sites nearing completion as part of the Phase 1 of the GSR project.

WSIP IN REVIEW / FISCAL YEAR 2016-2017



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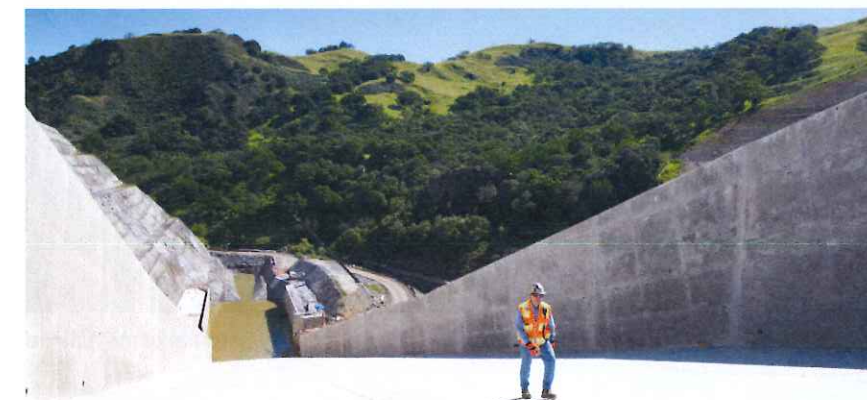
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WSIP IN REVIEW FISCAL YEAR 2016-2017



Completed spillway at Calaveras Dam Replacement Project.

Calaveras Dam Replacement Project Completes Spillway and begins Dam Embankment Work

The Calaveras Dam Replacement Project (CDRP) reached important milestones in 2016. Major components completed include the new intake tower, the spillway, the foundation grouting, and the dam crest electrical building.

In April 2016, the construction crews completed a new spillway equivalent to the width of an eight lane freeway. The massive concrete structure is 1,550 foot long and 60 to 80 feet wide, with walls that range from 20 to 40 feet high. The spillway alone used more than 50,000 cubic yards of concrete. The crews then began constructing the dam embankment in July 2016. The grouting of the dam foundation was completed by early December 2016. The project is over 80% done, and project completion is anticipated in mid-2019.



Newly completed intake tower at Calaveras Reservoir.



Crews work a drilling rig at the Calaveras Dam Replacement Project.



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