

TO: BOARD OF DIRECTORS

FROM: BEAU GOLDIE

CEO BULLETIN

Week of January 8 - 14, 2016

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None to Report

Board Policy EL-7: Communication and Support to the Board

The BAOs inform and support the Board in its work.

Further, a BAO shall:

Inform the Board of relevant trends, anticipated adverse media coverage, or material external and internal changes, particularly changes in the assumptions upon which any Board policy has previously been established.

Report in a timely manner an actual or anticipated noncompliance with any policy of the Board.

INSIDE THIS ISSUE

Public Survey to Gather Feedback for the Water District's Update to its Local Hazard Mitigation Plan

The water district is asking for public input that will help inform updating its Local Hazard Mitigation Plan (LHMP). The LHMP identifies natural hazards throughout Santa Clara County and assesses the vulnerability of critical infrastructure and facilities to these hazards.

The Federal Emergency Management Agency (FEMA) requires public agencies to have a plan to mitigate natural hazard impact on its daily operations. Every five years the water district is required to update the plan, which is currently underway. To support this effort, the water district has engaged a consultant.

An online survey has been created to gather responses that will help with LHMP preparation. The survey link was sent to the water district's 22,000 plus eNewsletter subscribers, deemed to be a more than ample audience size for this survey. Additionally, hard copies of the survey will be provided at future public events and meetings through the end of February 2016.

The survey and information on the current LHMP is on the water district's website under "Programs".

For further information, please contact Teresa Alvarado at (408) 630-3081.

Stevens Creek-Evelyn Bridge Fish Passage Project Celebration

On the afternoon of Wednesday, January 6, 2016, the water district hosted a celebration ceremony for the completion of the Stevens Creek-Evelyn Bridge Fish Passage project.

Hosted at the Mountain View City Council Chambers, nearly 40 attendees celebrated the first completed project of the Safe, Clean Water and Natural Flood Protection Program, Priority D4: Fish Habitat and Passage Improvements.

Attendees included the Mountain View Mayor and City Council members as well as representatives from various environmental and community organizations, such as Acterra, Friends of Stevens Creek Trail, Guadalupe-Coyote Resource Conservation District, Sierra Club, and more. Kathy Sutherland and Kit Gordon represented the Safe, Clean Water and Natural Flood Protection Program's Independent Monitoring Committee.

The ceremony highlighted the water district's collaboration and commitment to improving creeks and streams to support native species, such as the threatened steelhead trout. Directors Santos and Hsueh provided celebratory remarks and acknowledgements, followed by Mondy Lariz of the International Federation of Fly Fishers, and Mountain View Mayor Patricia Showalter. Senior District Representative Lisa Chung from California State Senator Jerry Hill's Office also presented the water district with a Certificate of Recognition for completing a successful project and for the water district's ongoing work to maintain clean and healthy creeks.

To commemorate the project and thank the City of Mountain View for their support and use of

their land, the water district presented designs for an interpretive bench that will showcase information about the project and steelhead trout. The bench will be installed next to the pedestrian bridge at Evelyn Avenue with a view of Stevens Creek.

For further information, please contact Norma Camacho at (408) 630-2084.

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Winter 2015-2016 Treatment Plant and Pipeline Shutdowns

From December 2015 through April 2016, several critical Water Utility facilities will undergo shutdowns to support winter maintenance, asset management, and capital improvement projects. With lower water demands in the winter, Water Utility facility shutdowns are typically scheduled from November through March.

On the west side, Rinconada Water Treatment Plant (Rinconada) has three major shutdowns, each for a week in duration, scheduled in December, January and March to support the Rinconada Reliability Improvement Project. During these shutdowns, work will also be completed in support of asset management and winter maintenance.

The first shutdown ran from December 7 to 17. The shutdown was longer than expected due to discovery of a leak on the Sunnyvale Distributary. The water district repaired the leak and Sunnyvale's turnouts were returned to service on December 31. The second shutdown began on January 11 and will run through January 19. The third shutdown is scheduled for a week in early March, with exact dates to be determined. The contractor is using the shutdowns to install new large-diameter pipe connections that will support the new plant processes and other work that requires the plant to be offline.

Construction at Rinconada is taking place during daytime, weekday hours, with some extended hours before and during plant shutdowns. Plant neighbors are updated regularly through the district's blog and quarterly neighborhood meetings. Retailers impacted by the outages are the cities of Mountain View, Santa Clara, and Sunnyvale, the California Water Service Company, and the San Jose Water Company. The impacted retailers use their groundwater and/or San Francisco Public Utilities Commission (SFPUC) supplies to meet demands during the Rinconada shutdowns. Customers may notice a change in water characteristics and pressure during the shutdowns.

On the east side, the Snell Pipeline and the Santa Teresa Water Treatment Plant (Santa Teresa) also have major outages scheduled. The 5-year pipeline rehabilitation program includes three phases of work on the Snell Pipeline. The first two phases were completed in FY 2014-2015. The pipeline shutdown for Phase III is scheduled to begin on January 19, 2016, and the pipeline will be returned to service by April 22, 2016. Phase III includes inspection and rehabilitation of 5.6 miles of the Snell pipeline. Because the Phase III shutdown extends into April, there is a chance the SCVWD-SFPUC Intertie may be needed to help meet peak demands in the Penitencia service area. The water district is working closely with impacted water retailers, which include the cities of San Jose and Milpitas, and San Jose Water Company. Customers will experience little to no change in water characteristics from the Snell Pipeline Rehabilitation Project unless the Intertie is used. Retailers will continue to receive water from Penitencia during the entire Snell shutdown, and from Santa Teresa from January 19 to April 4.

From April 4 to April 22, 2016, Santa Teresa and Graystone turnout will also be shut down. This

shutdown will allow the completion of winter maintenance and asset management work at Santa Teresa, such as a large-diameter backwash valve replacement, as well as flowmeter replacement at the Graystone turnout. San Jose Water Company will be impacted by the Santa Teresa shutdown and will be using groundwater as an alternative supply.

For further information, please contact Angela Cheung at (408) 630-2735.

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Update on Santa Clara Conduit Failure Investigation and Next Steps

The water district has been working with the U.S. Bureau of Reclamation (Reclamation) from the time the water district discovered a catastrophic failure on the Santa Clara Conduit on August 1, 2015. Completed in 1985 by Reclamation, the Santa Clara Conduit is a 23 mile long 96-inch diameter Prestressed Concrete Cylinder Pipe (PCCP) that together with the 8 mile long 120-inch Pacheco Conduit conveys Central Valley Project water (CVP) to Santa Clara County. It is part of the San Felipe system that delivers CVP water to both San Benito and Santa Clara counties.

On Saturday, August 1, 2015, at approximately 5:30 a.m., a 24-foot section of the Santa Clara Conduit suffered a catastrophic failure. This pipe section is located a quarter of a mile downstream of the Santa Clara Conduit/Hollister Conduit bifurcation near Casa de Fruta.

The water district CEO declared an emergency on August 3, 2015. Water district staff, along with contractors, replaced the failed section of pipe, inspected 3,637 feet of adjacent piping, completed internal repair for two distressed sections with 30 and 50 wire breaks respectively, returned the pipeline to service on September 3, 2015, and completed site restoration on September 20, 2015. The board was informed of the pipeline repair progress at four board meetings in August and September of 2015, and unanimously approved staff's recommendation to continue the emergency action declared by the CEO until the San Felipe system was returned to service.

Since September 2015, the water district has continued its investigative efforts to determine the root cause of the pipe failure. Several entities under contract with the water district and Reclamation have been working on various aspects of the investigation. Pure Technologies summarized their electromagnetic inspection and condition assessment of 3,637 feet of pipe near the failed section. JDH Corrosion Engineers and Simpson, Gumpertz, and Heger Inc. (SGH) completed their evaluations of the cause of the failure including analysis of the mortar, steel, concrete, and soil from the failed pipe and adjacent soil. Reclamation also completed its own lab analysis of soil, concrete, steel, and mortar samples of the pipe and surrounding soil. The reports were received by the water district between October and December of 2015.

The water district has reviewed the reports and met with Reclamation to discuss the preliminary findings. Preliminary findings indicate that the root cause is likely due to severe deterioration in some areas of the mortar coating that protects the prestressed steel wires and exposing the wires to moisture, which led to corrosion of the wires and subsequent failure of the wires. Carbonation of the mortar was exacerbated by micro-cracking of the mortar that could be a result of manufacturing, transportation, and/or handling and placement, and together with environmental conditions degraded the cement layer that passively protects the steel wires from corrosion when they are embedded in concrete.

The water district is working with Reclamation to understand how these findings relate to the 31

miles of PCCP in the San Felipe system managed by the water district. Because the San Felipe system is owned by Reclamation, Reclamation is preparing a report summarizing the findings and will be providing their recommendation for PCCP management strategy for the San Felipe system going forward. Reclamation's report is expected to be shared with the water district at the end of February 2016.

While the report from Reclamation is being compiled, the water district is moving forward with the following activities for the San Felipe system:

- 1. Complete Close Interval Survey (CIS) A CIS has been initiated, which is an external corrosion assessment technique frequently used in pipeline inspections.
- 2. Complete cathodic protection installation for the entire San Felipe system Design has been completed and is being reviewed by Reclamation. Installation is planned for summer of 2016 after obtaining environmental clearances.
- 3. Complete GIS mapping for the San Felipe system This will allow the water district to manage condition information on each of the estimated 7,500 pieces of PCCP in the Pacheco and Santa Clara conduits and track condition deterioration over time.
- 4. Conduct inspection and rehabilitation of the Pacheco Conduit in FY2017 the water district has started planning and design for the Pacheco Conduit Rehabilitation Project.
- 5. Conduct inspection and rehabilitation of the Santa Clara Conduit The water district plans to complete an inspection and rehabilitation project for the Santa Clara Conduit in 2018 and 2019.

The water district expects to present failure analysis of the Santa Clara Conduit and Reclamation's recommendation for future PCCP management strategy to the board in a work study session in March/April of 2016, after receiving Reclamation's report.

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