

**MEMORANDUM**

May 15, 2019

**TO:** Reclamation District No. 2025

**FROM:** Nathan Hershey

**SUBJECT: May 2019 Engineer's Report**

Described below are the engineering items to be discussed at your May 15, 2019 meeting.

**Subventions 2017-18** – The District submitted an application for participation in the Program in the amount of \$605,000. \$14.5 million has been approved for Program funding for FY 2017-18. The District's final claim has been submitted in the amount of \$105,064.66.

**Subventions 2018-19** – The District submitted an application for participation in the Program in the amount of \$645,000. \$12 million has been approved for Program funding for FY 2018-19, consistent with recent previous years.

**Subventions 2019-20** – The District submitted an application for participation in the Program in the amount of \$845,000.

**Annual Maintenance** – Attached are the current maintenance items we are tracking. We received a response from Contra Costa County regarding the planned maintenance for Holland Tract Road this year. The road is scheduled to receive a single chip seal treatment, likely sometime between July and October.

**Five Year Plan** – We have received a fully executed funding agreement for the Five-Year Plan (FYP). We have started work on the Plan update and have requested an advance of funds.

**DWR Emergency Response Grant Update** – Contra Costa County's consultant, Michael Baker International (MB), submitted a draft of the Local Flood Safety Plan for review and comment. We have reviewed the Plan and have provided MB with comments. MB is working with the County, continuing to progress the plans for each RD. We will keep you posted as we receive additional updates.

**SB 88** – Work under Phase 2 of the measurement experiment (work plan for 2019) is progressing and coordination with the Delta Measurement Experimentation Consortium continues.

Siphon logs for calendar year 2018 have been summarized and will be used for water right reporting calculations. 2019 siphon logs have been received for the month of March and collection of April logs is in process. A site visit to Holland Tract was conducted to continue portable meter testing of siphon maximum capacity and flow at a typical operation level, which will be used to adjust water right reporting calculations. Additional site visits were limited due to non-use of siphons, but portable meter testing is scheduled to continue during the irrigation season.

Seven of the nine existing test sites appear to be functioning properly and collecting flow data. Two of these four sites (Bouldin Island Siphon Nos. 39 and 40) were vandalized early this year. Replacement equipment

for one site has been purchased and was installed last week, which is now functioning properly. Replacement equipment for the second site has been ordered and is awaiting payment from MWD prior to being shipped for installation. A security enclosure is in the process of being installed to protect the equipment at these two sites from future vandalism. Another two metered sites were not functioning last month due to wiring and programming issues. Both of these sites were recently visited by MBK for repair; one repair was successful. The other site is still producing erroneous data and will need further investigation.

In addition, water level and pressure sensor equipment at three sites require troubleshooting and/or maintenance. The internal batteries died on the land side water level sensor installed at Bouldin Island Siphon No. 2. The sensor was removed and batteries have been replaced; the sensor will be reinstalled at the next site visit to Bouldin Island. The mounting of the land side water level sensor at Bouldin Island Siphon No. 40 has been corroded and therefore the sensor has been removed. This sensor does not have an internal data logger and therefore will be reinstalled when the replacement data logging equipment is installed at the vandalized site. Also at Bouldin Island Siphon No. 40, the water side water level sensor is experiencing telemetry communication issues. Lastly, the land side water level sensor at Bouldin Island Siphon No. 14 is experiencing communication issues with the data logger. MBK is currently discussing with the manufacturers possible solutions at all sites still experiencing issues.

Cost estimates have been prepared to correct damage to solar panel installations due to wind, and to purchase new equipment for testing at three additional siphons as part of Phase 2, which will be provided to MWD soon.

# Reclamation District No. 2025 Holland Tract

## Issue Tracking Summary

5/10/2019

IssueID	Priority	Report Date	Reporter	Location	Issue Type	Description	Action	Field Notes
2	Medium	9/13/2016	Russ Ryan	Station 185	Crack	Crack in splash cap near leak	Monitor	Monitor; See photos
7	Medium	10/31/2016	Contra Costa County	Station 519-550	Crack	Pavement cracking on levee crown roadway; sloughing on landside hinge	Repair	NH and DF to schedule site visit and develop plan; Proposal received from Hultgren-Tillis; field work complete; geotechnical report finalized and issued
22	Low	2/10/2017	Nate Hershey	Station 545+80	Boil	Boil in landside slope	Monitor	Directed Asta to build a containment berm; Berm constructed; continue to monitor. 2/13/17 No flow coming through levee, relatively dry
25	Medium	2/13/2017	Nate Hershey	Station 105	Erosion	Erosion site	Repair	Repair; Monitor and repair when feasible
28	Low	2/18/2017	Russ Ryan	Station 315+75	Rodent Activity	Rodent Activity	Repair	Repair; Monitor and repair when feasible
40	Low	3/22/2017	Dave Forkel	Station 465	Encroachment	Abandoned 8" siphon	Repair	Investigate and remove
60	Medium	1/18/2018	Brian Janowiak	Station 414-417	Other	Rodent activity	Monitor	Minor squirrel activity, mostly on upper LS slope. One larger void in levee crest (Sta 417) may need to be excavated.