

MEMORANDUM

April 10, 2019

TO: Reclamation District No. 756

FROM: Nathan Hershey

SUBJECT: April 2019 Engineer's Report

Described below are the engineering items to be discussed at your April 10, 2019 meeting.

Subventions 2017-18 – The District submitted an application for participation in the Program in the amount of \$900,000. \$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 \$415,760.88.

Subventions 2018-19 – The District submitted an application for participation in the Program in the amount of \$845,000. \$12 million has been approved for Program funding for FY 2017-18, consistent with recent previous years.

Subventions 2019-20 – Applications for participation in the Program were due April 1. The District submitted an application in the amount of \$750,000.

Annual Maintenance – Attached are the current maintenance items we are tracking.

Special Projects – The District submitted a full application for a project under DWR's 2016 Projects Solicitation Package (PSP) for Multi-Benefit Projects. The full application proposed a project between Stations 500 and 540 that would create a habitat bench and set the levee back, while also relocating the District's Camp 5 pump station, moving it further landward. Subsequently, we requested an expansion of the project area to include rehabilitation from Stations 540-550. We have received a funding agreement for the work, and DWR has responded to our inquiry about eligibility of relocating the pump station. Removal of the existing pump station is an eligible cost (95% State share), and the new pump station will be eligible for 50% State share. Input is needed from the Board on how to proceed.

We have submitted a Full Proposal for a Directed Action project to rehabilitate the north levee. DWR is currently reviewing the proposal.

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.

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 February and collection of March logs is in process. A site visit to Webb 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. A site visit to Holland Tract for portable meter testing has also been scheduled.

Six of the nine existing test sites appear to be functioning properly and collecting data. Three of the existing test sites require troubleshooting and/or maintenance efforts to regain equipment function and data collection. Two of the three sites need extensive equipment replacement due to vandalism. The third site requires additional programming of the flow meter and data logger, which will be conducted during the next visit to the site. In addition, water level and pressure sensor equipment at three sites require troubleshooting and/or maintenance. MBK is currently discussing with the manufacturers possible solutions at all sites. Cost estimates have been prepared to replace all of the vandalized equipment at Siphon Nos. 39 and 40 on Bouldin Island, 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. The purchase order to replace equipment on Siphon No. 39 was placed earlier this month and the purchase order for equipment at Siphon No. 40 is anticipated to be placed soon.

MWD provided an update to the Consortium at its March meeting, focused on the equipment vandalism/damage and its plan for 2019.

Reclamation District No. 756 Bouldin Island

Issue Tracking Summary

4/5/2019

| IssueID | Priority | Report Date | Reporter | Location | Issue Type | Description | Action | Field Notes | Corrective Action | Corrected Date | Future Notes |
|---------|----------|-------------|---------------|-----------------|--------------|--|---------|--|-------------------|----------------|--------------|
| 23 | Low | 2/11/2017 | JaimeBarajas | Station 859 | Boil | Boil on lower levee slope/toe; running at high tide | Monitor | 25 LF core trench along WS hinge to depth of 8'; no pipe or water encountered; backfilled with native material. | | | |
| 24 | Low | 2/11/2017 | JaimeBarajas | Station 924+10 | Boil | Boil on lower levee slope/toe; running at high tide | Monitor | 40 LF core trench along WS hinge to depth of 8'; encountered water seeping from landside trench wall at 8' depth; backfilled with native and imported dry fill; Drainage ditch to be cut along Caltrans access roadway from Sta 926 to Sta 2 to relieve ponding. Work to be done by Sierra Cattle. | | | |
| 34 | Low | 2/20/2017 | NateHershey | Station 813 | Encroachment | Siphon may be low | Monitor | 8/14/17 - Waterside top of pipe = 7.2; 100 yr. flood = 7.6; 12" siphon; pipe is low; Continue to Monitor | | | |
| 41 | Medium | 3/28/2017 | RalphHeringer | Station 544-549 | Crack | Cracking in LS Slope; seepage and cattails at toe | Monitor | Monitor and discuss repair; 10/23/17 Levee crown trenched; no encroachments located, Area to be graded and prepared for flood season; will proceed under Special Projects upon receipt of PFA. 12/4/17 - grading complete | | | |
| 53 | Medium | 8/11/2017 | NateHershey | Station 324 | Seepage | Seepage at toe of 3 to 1 slope | Monitor | Monitor | | | |
| 54 | Medium | 8/11/2017 | NateHershey | Station 336 | Seepage | | Monitor | Monitor; The hole is shallow at about 1-2 inches deep. | | | |
| 63 | Medium | 3/23/2018 | RussRyan | Station 72 | Crack | Longitudinal crack on land side slope near toe of Levee. Crack runs several hundred feet parallel to Levee road. See photos. | Repair | Investigate and monitor; It's clear to me that there is differential settling after slope vegetation was cleared. | | | |

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| 65 | Medium | 5/8/2018 | RussRyan | Station 710 | RodentActivity | Adjacent to Duck Club office on Levee slope water side. Appears to be possible Beaver Den discovery during low tide. | Repair | Min. Fill material;Need to investigate extent of hole and fill in with Levee backfill material/rock. | | | |
| 65.1 | Medium | 6/19/2018 | AndrewReece | Station 712+00 | RodentActivity | Possible beaver den by district office, west of tree on ws slope | Repair | Two levee penetrations, one on top of other. WS slope sloughing. | Information added to Issue update 65.1 | | |
| 74 | Low | 1/5/2019 | RussRyan | Land side within 150 foot Levee footprint. See attached photos. Low wet areas. | Other,Sinkhole | Bouldin Island - West stretch length adjacent to Mokelumne River. See attached photos for exact location. | Investigate | See notes above. | | | |
| 85 | Low | 4/1/2019 | MichaelNishimura | 79+00-80+00 | Sloughing | sloughing on water side for about 100 feet, cracking at hinge | Monitor | | | | |