

**MEMORANDUM**

May 6, 2020

**TO:** Reclamation District No. 756

**FROM:** Nathan Hershey

**SUBJECT:** May 2020 Engineer's Report

Described below are the engineering items to be discussed at your May 6, 2020 meeting.

**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 2018-19, consistent with recent previous years. The District's final claim was submitted in the amount of \$253,623.03. DWR and CDFW have performed their annual inspection and the claim is currently being processed.

**Subventions 2019-20** – The District submitted an application for participation in the Program in the amount of \$750,000. DWR has lowered the Program funding amount to \$10 million for FY 2019-20.

**Subventions 2020-21** – Applications for participation in the Program were due April 1. The District submitted an application in the amount of \$1,595,000. We have received notice from DWR that \$12,000,000 is being committed to the Program for FY 2020-21.

**Annual Maintenance** – Attached are the current maintenance items we are tracking. Some waterside slope erosion was recently observed. We recommend reviewing the slope conditions via drone and performing routine maintenance prior to the flood season.

The southernmost pipe going through the levee at the Camp 5 Pump Station (Station 525) has been replaced. The new pipe was placed above the flood plane and the work is complete.

**Special Projects** – We received a letter from DWR informing us that the Department has decided to withdraw its offer of a Project Funding Agreement due to the current funding availability, or lack thereof. There are several inaccuracies in the letter and a response has been drafted and distributed for review and comment via email. We will work with the District on how to proceed.

We received a fully executed funding agreement for the design portion of the Directed Action project to rehabilitate the north levee. We have requested an advance of funds from DWR. We can begin work on the design at the District's discretion.

**Five Year Plan** – Work on the Five-Year Plan is currently in progress. A draft of the plan has been distributed via email and we have incorporated many of the comments received to date. We have also sent a draft to DWR staff for review and comment. The Plan must be complete by the end of 2020.

**SB 88** – Work under Phase 2 of the measurement experiment (work plan for 2019 through February 2020) has been completed. All the data collected during this period has been reviewed and analyzed. MBK has prepared a draft report to update last year's experiment summary report. This draft was provided to MWD

for final review and will be finalized as soon as comments are received. Work under Phase 3 of the measurement experiment (February 2020 through February 2021) is underway, as outlined in the approved Request for Additional Time.

Phase 3 efforts primarily involve installing 8 additional flange magnetic meters on the water side of the highest use siphons, with at least one flow meter on each island. MBK conducted site visits to each of the proposed sites during April to check installation locations and pipe conditions. All proposed sites will include telemetry equipment, with the intent to post data to the Reclamation District websites for each island. MBK has obtained quotes for equipment and installation costs, which will be provided to MWD for review soon.

The Delta Measurement Experiment Consortium has not yet scheduled its next meeting and MBK has not received any updates on the status of the Open ET beta testing.

**Reclamation District No. 756 Bouldin Island**

**Issue Tracking Summary**

5/4/2020

IssueID	Priority	Report Date	Reporter	Location	Issue Type	Description	Action	Field 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

# Reclamation District No. 756 Bouldin Island

## Issue Tracking Summary

5/4/2020

IssueID	Priority	Report Date	Reporter	Location	Issue Type	Description	Action	Field Notes
41.1		4/24/2020	NateHershey					Reviewed the site area. Area appears to be moving again - not as dramatic as in 2017, but it appears to be along the same fault lines. Seepage observed exiting the surface. Recommend performing an updated survey and developing an action plan.
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.
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.
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	

# Reclamation District No. 756 Bouldin Island

## Issue Tracking Summary

5/4/2020

IssueID	Priority	Report Date	Reporter	Location	Issue Type	Description	Action	Field Notes
86	Medium	5/7/2019	Brian Janowiak	Sta 845+00 to 846+00 between toe road and seepage ditch	Seepage	Seepage between toe road and seepage ditch appeared last week. Does not appear to be tidally influenced and a point source was not located. Additional minor wet spots observed between Sta 841+00 and 843+00. No known history of seepage at this location.	Repair	District (Dave, Russ, Ralph) to review site on 5/10. Exploratory trenching will likely be required. Perform trenching when convenient as long as site does not change or worsen.
86.1		5/10/2019						Looks like seepage is drying up.
88	Low	6/7/2019	Dave Forkel	Sta 382+00	Seepage	Seepage on side of levee.	Investigate	
93	Medium	9/26/2019	Andy Reece	693+00	Sloughing, RodentActivity	sloughing and possible rodent den	Investigate	big rock and might be eroding, possible beaver as well
94	Low	9/27/2019	Brian Janowiak	Lower toe	Other, Settlement	Area along lower toe near seepage ditch by Floeida tip appears to have settled.	Monitor	
96	Medium	4/22/2020	RussRyan	Between 630 and 640	Seepage	Appears to be seepage	Repair	
97	Medium	4/24/2020	NateHershey	Station 536+25	Erosion	Eroded waterside slope, 60LF +/-	Investigate	