

**MEMORANDUM**

February 17, 2021

**TO:** Reclamation District No. 756

**FROM:** Nathan Hershey

**SUBJECT:** February 2021 Engineer's Report

Described below are the engineering items to be discussed at your February 17, 2021 meeting.

**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. The District submitted a claim in the amount of \$213,176.91 for the fiscal year.

**Subventions 2020-21** – The District submitted an application for participation in the Program in the amount of \$1,595,000. \$12 million has been approved for Program funding for FY 2020-21.

**Subventions 2021-22** – We are working on a draft application for FY 2021-22. Our recommendation is to submit an application that is similar to recent previous fiscal years.

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

**Regional Flood Fight Supply Depot** – The District has signed a MOA with Sacramento County to move forward with development of a regional flood fight supply depot. We have developed a preliminary site layout and are working on the logistics of developing the depot.

**Special Projects** – DWR has renewed the offer of State funding for the levee setback and habitat enhancement project on the west levee. The District responded with an acceptance letter and we are waiting to receive the funding agreements for signature.

The District received an advance of funds for design of the Directed Action project to rehabilitate the north levee. We have started work on the design and will be moving forward in anticipation of construction. The District will need to consider a variety of issues, including availability and location of onsite borrow material, structure/encroachment demolition, and other issues that may result in an impact to the landowner and/or their tenants.

**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. DWR has extended the expiration date of the funding agreements to December 31, 2021.

**SB 88** – Work under Phase 3 of the measurement experiment (Feb 2020 through Feb 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. MWD has received the new equipment which is currently stored on Bacon Island. A pre-bid

walk through is scheduled for February 24th on Bouldin Island for interested contractors. After the walk through, MWD will select a contractor to install the Phase 3 equipment.

MWD and the RDs are in compliance for calendar year 2021 under an approved extension of time. Current direction by MWD is to proceed with strict compliance (instead of a combination of strict compliance and an MWD Alternative Compliance Plan as reported last month). Therefore, MBK is currently developing a draft plan for strict compliance, which will include a combination of flange magnetic meters installed on the water side for the largest and highest use siphons and alternative measurement methods at the smaller, less frequently used siphons.

Development of the Delta-wide ACP by the Delta Measurement Experiment Consortium to utilize Open ET for measuring and reporting diversions continues. MBK and MWD continue to participate in the Consortium, which met on January 28, 2021, and will provide feedback on the future development of this ACP as needed. The next Consortium meeting has not yet been scheduled.

**Reclamation District No. 756 Bouldin Island**

**Issue Tracking Summary**

2/12/2021

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

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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.
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.
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	

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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	
95	Medium	3/16/2020	DaveForkel	Sta 500+00	Other	Abandoned houseboat almost completely destroyed	Monitor	Sheriff contacted
96	Medium	4/22/2020	RussRyan	Between 630 and 640	Seepage	Appears to be seepage	Investigate	
99	Medium	7/28/2020	RussRyan	Between Sta 20+00 and St 40+00.	Sinkhole	An 18" diameter pot hole on levee crest road closer to waterside slope.	Repair	Will need to investigate extent of below surface voids below sink.
104	Medium	11/19/2020	DaveForkel	Sta 426+00	Sloughing	Waterside crack about 100 ft total, spread over 3-4 sites	Repair	
106	Medium	12/17/2020	RussRyan	Bouldin Island (see photo for location)	Crack	Levee crest road crack (towards water side). Crack length is about 7 step paces (Russ Ryan) and depth is unknown.	Monitor	
107	Medium	12/17/2020	RussRyan	See photos	Seepage	Just inside levee footprint on land side of toe drain there water ponding. Was there prior to any rain this season during dry period.	Monitor	See photos taken on site.
109	Medium	2/8/2021	NateHershey	Camp 5 pump station	Seepage	Water reported coming through the levee.	Repair	It was determined the cause of the seepage is due to the pipe leaking when pump 3 is on. Source of water traced to the pipe going through the levee. Video is available. Recommend repair of pipe.

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110	High	2/8/2021	NateHershey	Station 849	Boil,Seepage,Sinkhole	Water reported coming through the levee at Station 849. A site investigation revealed there are several sinkholes on the 3 to 1 land side slope. Standing water observed in the sinkholes and on the toe berm. Appears to be an old pipe somewhere in the levee. Contractor mobilizing equipment to trench and locate encroachment.	Investigate	
110.1		2/9/2021	MikeKynett					1.5" dia. threaded metal pipe encountered at a depth of 12 ft.; 20 LF removed. A second 2" dia. metal pipe located while excavating in landside slope; depth = 8-10 ft.; pipe too deep to excavate with backhoe; excavator mobilized and trenching to resume 2/10