

MEMORANDUM

October 7, 2020

TO: Reclamation District No. 2028

FROM: Nathan Hershey

SUBJECT: October 2020 Engineer's Report

Described below are the engineering items to be discussed at your October 7, 2020 meeting.

Subventions 2019-20 – The District submitted an application for participation in the Program in the amount of \$615,000. DWR has lowered the Program funding amount to \$10 million for FY 2019-20. We are working on compiling the District's claim. Final claims are due November 1.

Subventions 2020-21 – The District submitted an application for participation in the Program in the amount of \$615,000. \$12 million has been approved for Program funding for FY 2020-21.

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

Special Projects – The enhancement component of the Old River multi-benefit levee rehabilitation project is in-progress. Maintenance activities will be on-going to promote plant health and longevity.

We received a fully executed funding agreement for the design portion of the Directed Action project to rehabilitate the north and south levees. We have requested an advance of funds from DWR. Work is mostly on hold until we receive the advance of funds.

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 obtained funding approvals for Phase 3, however is currently investigating flow meter issues prior to approving the new equipment quotes and setting up a bid process for installation. After the invoices are submitted, there is up to a 6-week lead time for new equipment to be delivered. To follow up on issues with the Ultra Mag meter at Bouldin Island Siphon No. 24, during September MBK continued discussions with McCrometer and also contacted Technoflo to discuss potential solutions for future installations as well as potential alternative flow meters. Technoflo identified that the water intrusion could have taken months to reach circuit boards in the unit, making it impossible to identify when the intrusion occurred. Due to the issues with the meter, the purchase of new equipment (which includes 4 Ultra Mags) is

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temporarily on hold until methods to prevent this issue from occurring in the future or changes to the warranty is determined. An additional meeting with Technoflo is scheduled in early October to discuss protective measures for future installations and the purchase of meters for all active siphons on each island. MBK is currently preparing a document to describe a plan and estimated costs for long term, strict compliance with the Measurement Requirements on the MWD islands. This document is intended to be provided to MWD in October for discussion purposes.

The next Delta Measurement Experiment Consortium meeting is on October 15, 2020, which includes presentations by the Delta Watermaster's office on Open ET and the development of a Delta-wide Alternative Compliance Plan. MBK and MWD will continue to participate in the Consortium and provide feedback on the future development of the ACP.

Reclamation District No. 2028 Bacon Island Issue Tracking Summary 10/2/2020

IssueID	Priority	Report Date	Reporter	Location	Issue Type	Description	Action	Field Notes
				Station 275 @		Trash racks in need of		
6	Medium	10/21/2016	Ralph Heringer	Pump Station	Broken Equipment	maintenance/repair	Investigate	TBD
						Eucalyptus trees present a		
8	Low	11/2/2016	Dave Forkel	Station 668-702	Encroachment	hazard	Investigate	Review, explore removal
						Seepage exiting at toe of		
						slope near retaining wall		12/4/17 - Area dried up after
36	Low	2/24/2017	Nate Hershey	Station 712	Seepage	structure.	Monitor	winter; continue to monitor
						Seepage existing at toe of		
						slope, running across county		
43	Medium	4/4/2017	Brian Janowiak	Station 92-93	Seepage	road		
						CDFW mitigation site shows		
48	Low	6/14/2017	Dave Forkel	Station 190+00	Vegetation control	evidence of arundo mowing.	Investigate	Discuss mitigation requirements.
70		40/24/2046	Bullet Harden	Station 465 @	5	Trash racks in need of	1	TDD
73	Medium	10/21/2016	Ralph Heringer	Pump Station	Broken Equipment	maintenance/repair	Investigate	TBD
84	Medium	4/4/2019	RussRyan	95+00	Boil	Lower tide now and I think the roadway pothole (boil ??) needs repair at some point. I know it's a county road. We'll have to figure since once the (what I'm assuming) is a leak of repaired then the road will need to also be repaired.	Repair	
92	High	9/19/2019	AndyReece	Sta 688+00 - 689+00	Crack	deep cracks at LS hinge and LS slope	Investigate	5 ft plus feet deep approx 3 inches wide along LS hinge and landside slope. In summer 2019, cracking area was excavated and recompacted, AB was placed on the crown. On the waterside of the cracking site a beaver den was collapsed and back filled with AB in summer 2019.
32	IIIgII	3/13/2013	Anayneece	003100	Crack	L3 310pc	ilivestigate	Juillilei 2013.

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92.1	High	6/29/2020	Michael Nishimura	Sta 688+00 - 689+00	Crack	The cracking site, repaired by Dino and Sons in Summer 2019, has reopened and is approximately 100 feet in length. The number of cracks and the depth of cracks are unknown at this time.	Repair	
92.2	High	8/7/2020	Nate Hershey	Sta 688+00 - 689+01	Crack	Repaired by Dino and Sons again this week. Continue to monitor the area.	Monitor	
95	Medium	12/12/2019	AndyReece	siphon north of Mel's	RodentActivity	possible beaver den under tree south of siphon	Investigate	
100	Medium	9/17/2020	NateHershey	Station 102	Sloughing	Waterside slope is sloughing. Starting to encroach into the county road.	Repair	
						Field verified erosion site detected by drone footage. Site is approximately 100 feet long, adjacent to willows and vegetation is	·	
101	Medium	9/17/2020	NateHershey	Station 704	Erosion	covering steep slopes.	Repair	