

MEMORANDUM

January 19, 2022

TO: Reclamation District No. 2028

FROM: Nathan Hershey

SUBJECT: January 2022 Engineer's Report

Described below are the engineering items to be discussed at your January 19, 2022 meeting.

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. A final claim in the amount of \$301,108.19 was submitted.

Subventions 2021-22 – The District submitted an application for participation in the Program in the amount of \$541,000. \$10 million has been approved for the Program for FY 2021-22.

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

Flood Fight Supplies – The District submitted the reimbursement package to San Joaquin County for flood fight supplies prior to the deadline. We are waiting to receive reimbursement.

Special Projects – The enhancement component of the Old River multi-benefit levee rehabilitation project (BN-15-1-SP) is in-progress. Maintenance activities will be on-going to promote plant health and longevity.

The District received an advance of funds for design of the Directed Action project to rehabilitate the north and south levees (BN-19-1-SP). We have submitted the draft Scope of Work to DWR for approval which includes draft environmental documents and 90% plans. The next step is to circulate the environmental documents for public review and comment. Our recommendation is to circulate the public draft and post the document to the State clearinghouse.

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 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, 2022. At DWR's request, we will be submitting the anticipated total cost of improvements for planning purposes by the end of the month.

SB 88 – Work under Phase 3 of the measurement experiment has been completed. Phase 3 efforts primarily involved installing 8 additional flange magnetic meters on the water side of the highest use siphons, with at least one flow meter on each island. Work under Phase 4 of the measurement experiment is expected to begin in the near future. MWD has authorized the purchase of 25 flow meters along with telemetry units to be installed on all four islands. The flow meters, flanges, bolts, and job boxes were delivered by Technoflo earlier this month. MWD has begun their inspection of the delivered equipment and will reach out to Technoflo if anything is missing and/or damaged. MWD has also begun the process of selecting a contractor to perform the installations of this equipment. The installations are estimated to be completed before the end

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of 2022. MBK has conducted visits to the proposed sites to identify work that needs to be completed prior to installing the flow meters. MBK will work with MWD and the selected contractor to complete these preparations.

After reviewing the notes and photos from MBK's visits to the Phase 4 sites, 4 siphons were identified as potentially having asbestos or had a tar coating on the pipe exterior. These hazardous materials could harm the contractor and the environment if not disposed of properly. MBK visited these sites with an environmental consultant, Bovee Environmental Management, on December 30th to determine if any hazardous materials are present. The tests showed hazardous materials were present at 3 of the 4 sites. MWD has already contracted with W.C. Maloney to remove the materials in the area where the flow meter would be installed. MBK will be joining W.C. Maloney at the first site to ensure there is enough material for the flow meter installation to continue.

MWD and the RDs are in compliance for calendar year 2022 under an approved extension of time. The extension was approved by the Delta Watermaster on January 13th, 2022 and will expire on January 1st, 2024. The extension of time included a Plan for Compliance which provides details regarding the methods to estimate diversions on siphons without flow meters and provides a measurement equipment installation schedule. MWD currently anticipates that installing all the flow meters will take five years. Therefore, MBK has provided cost estimates for flange magnetic meters with telemetry equipment installed on the water side of all active siphons.

Development of the Delta-wide ACP by the Delta Measurement Experiment Consortium to utilize Open ET for measuring and reporting diversions continues. RD staff are currently in the process of creating place of use polygons for each of the islands. MBK and MWD continue to participate in the Consortium.

Reclamation District No. 2028 Bacon Island

Issue Tracking Summary

1/14/2022

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
						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		
70		10/21/2016	5 1 1 11 1	Station 465 @		Trash racks in need of		
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	
				siphon north of		possible beaver den under		
95	Medium	12/12/2019	AndyReece	Mel's	RodentActivity	tree south of siphon	Investigate	
		, , , ,	,			Waterside slope is	- 0	
						sloughing. Starting to		
						encroach into the county		
100	Medium	9/17/2020	NateHershey	Station 102	Sloughing	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	

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						Site is in future Special		
						Projects work area.		
						Recommend monitoring and		
						repairing during levee		
101.1	Medium	1/8/2021	NateHershey	Station 704	Erosion	rehabilitation project.		
						Erosion at toe of levee at		
102	Medium	5/5/2021	DaveForkel	Sta 107+19	Erosion	siphon discharge.	Repair	Dino and Son to fill erosion site
						Erosion at toe of levee at		
103	Medium	5/5/2021	DaveForkel	Sta 175+15	Erosion	siphon discharge.	Repair	Dino and Son to fill erosion site
						Rock placed at waterside of		
104	Low	5/5/2021	DaveForkel	Junior's House	Sloughing	new fill settling.	Monitor	
405	Madiana	0/20/2024	Makallandha	Chatian COA	Civiliania	Three voids discovered near utilities and in the existing toe berm. Recommend collapsing and compacting	Donain	
105	Medium	8/20/2021	NateHershey	Station 694	Sinkhole	when feasible.	Repair	
106	Medium	11/4/2021	DaveForkel	Sta 170+00	Seepage	Seepage at toe of levee.	Monitor	