

MEMORANDUM

October 23, 2024

TO: Reclamation District No. 2028

FROM: Nathan Hershey, Brian Janowiak

SUBJECT: October 2024 Engineer's Report

Described below are the engineering items to be discussed at your October 23, 2024 meeting.

Subventions 2023-24 – The District submitted an application for participation in the Program in the amount of \$541,000. A total of \$14 million has been approved by the Central Valley Flood Protection Board for the Program for FY 2023-24.

Subventions 2024-25 – The District submitted an application for participation in the Program in the amount of \$541,000. A total of \$14 million has been approved by the Central Valley Flood Protection Board for the Program for FY 2024-25.

Future Subventions Funding – DWR has indicated that funding has not been secured yet for fiscal years 2025-26 and beyond. Delta advocates, including the California Central Valley Flood Control Association and others, are considering ways to increase awareness and gain support for securing funding for this highly successful and vital program. We have prepared a draft funding request letter for the RD to consider and possibly submit to state legislators.

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

Emergency Response Grant (Round 3) – San Joaquin County transmitted a memo to reclamation districts regarding grant funds that are available to update the District's emergency operations plan and flood contingency map. Up to \$15,000 per district is available. Our recommendation is to participate in the process and use this funding to update the documents.

FEMA – The District's claim is currently under review at FEMA. MBK will continue to check in with FEMA personnel regarding status updates. The total claim amount is \$52,398.36.

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.

Teichert is working to complete the south levee. Current work includes siphon rehabilitation, AB placement, and hydroseeding the landside slope. Once the south is complete, work will begin on the county road section. Coordination with San Joaquin County regarding county road impacts and the final roadway surface treatment is ongoing. If the county agrees to pave the road once the levee rehab is complete, construction will be complete by the end of the year. If the county insists on chip seal, Teichert will need to leave the county road as a compacted AB surface for the winter and then return in the spring to apply the prime coat oil and sand. Paving can be performed at much cooler temperatures, whereas chip seal requires warm weather to cure.

SB 88 – All Phase 4 meters have been installed and certified by MBK Engineers. Data is currently being collected at 37 sites across all four islands. MBK will continue to monitor all sites weekly via Wildeye's website. All Wildeye units are currently working with the exception of (1) Bouldin Island Siphon No. 30, and (2) Bouldin Island Siphon No. 24. Bouldin Island Siphon No. 30 was damaged by driftwood (equipment will be reinstalled when Phase 5 installations occur at nearby siphons). The data collected at Bouldin Island Siphon No. 24 is not being recorded correctly in Wildeye, which we believe is due to a configuration issue. MBK will reach out to Wildeye to try to resolve the issue. All meters are currently working, with the exception of (1) Bouldin Island Siphon No. 2, (2) Bouldin Island Siphon No. 26, and (3) Bacon Island Siphon No. 25. MBK worked with Technoflo to acquire a quote for a 14-inch conversion kit for Bouldin Island Siphon No. 26, which has been sent to MWD along with a request for further instruction on how to proceed. See August 2024 RD update for additional details.

All Phase 5 flow meters were delivered and inventoried January 4th on Bacon Island. Phase 5 bidding has closed and MWD staff are currently reviewing and selecting a contractor. Construction is set to begin around the end of October for Bouldin Island and Webb Tract. A separate request for proposals will be opened at a later date for Bacon Island and Holland Tract. The Phase 5 telemetry equipment has been purchased and will be delivered at the time of installation, following flow meter installations at each site.

On behalf of MWD, MBK provided an update during the September 24th Delta Consortium meeting. MBK has also provided MWD staff with a draft summary technical report on the 2023 OpenET and measured diversion comparison for review and comments.

MBK is currently preparing Water Year 2024 annual reports and will provide draft reports for review by MWD staff by the end of the year. On October 18th, MBK provided MWD staff draft language to be included in the 2024 annual reports for review. MWD staff will provide MBK crop acreages for each of the islands to be included in the annual reports.

RD 2028 - Bacon Island

Issue Tracking Summary October 18, 2024

Issue ID	Priority	Report Date	Reporter	Location	Issue Type	Description	Action	Field Notes
006	Medium	October 20, 2016 5:00 PM	RalphHeringer	Station 275 @ Pump Station	Broken Equipment	Trash racks in need of maintenance/repair	Investigate	TBD
036	Low	February 23, 2017 5:00 PM	Nate Hershey	Station 712	Seepage	Seepage exiting at toe of slope near retaining wall structure.	Monitor	12/4/17 - Area dried up after winter; continue to monitor
043	Medium	April 3, 2017 5:00 PM	Brian Janowiak	Station 92-93	Seepage	Seepage existing at toe of slope, running across county road		
073	Medium	October 20, 2016 5:00 PM	RalphHeringer	Station 465 @ Pump Station	Broken Equipment	Trash racks in need of maintenance/repair	Investigate	TBD
101	Medium	September 17, 2020 4:25 PM	Nate Hershey	Station 704	Erosion	Field verified erosion site detected by drone footage. Site is approximately 100 feet long, adjacent to willows and vegetation is covering steep slopes.	Repair	
101.1		January 8, 2021 1:00 AM	Nate Hershey					Site is in future Special Projects work area. Recommend monitoring and repairing during levee rehabilitation project.
102	Medium	May 5, 2021 11:13 AM	Dave Forkel	Sta 107+19	Erosion	Erosion at toe of levee at siphon discharge.	Repair	Dino and Son to fill erosion site
103	Medium	May 5, 2021 11:22 AM	Dave Forkel	Sta 175+15	Erosion	Erosion at toe of levee at siphon discharge.	Repair	Dino and Son to fill erosion site
104	Low	May 5, 2021 11:23 AM	Dave Forkel	Junior's House	Sloughing	Rock placed at waterside of new fill settling.	Monitor	
106	Medium	November 4, 2021 4:43 PM	Dave Forkel	Sta 170+00	Seepage	Seepage at toe of levee.	Monitor	
107	Medium	December 15, 2022 4:44 PM	Dave Forkel	Sta 704+00	Erosion	Levee experienced minor waterside erosion during last weeks storm.	Repair	District forces to repair.
108	Medium	January 10, 2023 10:33 AM	MichaelNishim ura	13+50 waterside hinge on road	Sinkhole, Other	6" diameter sink hole on ws road hinge. Probed for 5' deep going towards the water. Identical size hole on landside road hinge just across crown, probed about 2.5' into levee crest. The landside has multiple animal burrows 7" to 1' diameter in size. Probed 5' feet into levee towards levee center. Ground	Repair	

								1
						is very soft on landside slope		
						and steep. Approximately		
						1.5:1 to 2:1 slope. There is a		
						bulge at the lower landside		
						toe. It appears either a low		
						spot is ponding or potential		
						seepage is occurring on the		
						landside toe for		
						approximately 150' adjacent		
						to rodent activity and		
						sinkholes.		
						Potential sheet flow Seepage		
		January 10,	MichaelNishim			at landside toe. Adjective to		
109	Medium	2023 11:02		13+50 landside toe	Seepage	levee with several large	Monitor	
		AM	ura			rodent holes. Approximately		
						150-200' total site length.		
						Sloughing of ws slope. In the		
						adjacent areas the slope is		
						steep as well and it starts		
						right at the water side hinge.		
		January 10,				This sloughing is occurring in		
111	Medium	2023 11:42	MichaelNishim	98+90 to	Erosion,	a thick patch of ws slope and	Monitor	
	i i caiaiii	AM	ura	3013010	Sloughing	is still approximately in the	Pionicoi	
		711				same condition as it's		
						adjacent slopes. Grading		
						could help further damage		
						from surface runoff.		
		January 10				Erosion and sloughing 75' on		
110		January 10,	MichaelNishim	203+50 to 204+25	Erosion,	waterside slope. Scarping		
113	Medium	2023 12:10	ura	waterside slope	Sloughing	mid slope. Likely caused by	Monitor	
		PM				oversteepened slope and		
						surface run off.		
110		May 31,		G. 756 00		Mel reported crack and		
119	Low	2023 6:38	Dave Forkel	Sta 756+00	Crack	sloughing of riprap just south	Monitor	Not much obvious sloughing.
		PM				of bridge.		
		February 15,						
120	High	2024 12:00	Dave Forkel	Sta 733+00	Boil	Boil in toe ditch	Investigate	
		PM						
								Investigations indicate the
								water is coming from the field
								side. A trench was excavated in
								the field, and the direction of
								flow was coming from the field
								(flowing west to east).
								Recommend sandbagging
								around the boil to manage the
		February 22,						pressure. When conditions
120.1		2024 1:00	Nate Hershey					permit, next steps are to
120.1		AM						excavate an exploratory trench
								east of the toe ditch to see if
								there is flow is coming through
								the levee. If so, an exploratory
								trench in the levee crown is
								recommended.
								recommended.