

MEMORANDUM

October 16, 2019

TO: Reclamation District No. 2028

FROM: Nathan Hershey, Mike Kynett

SUBJECT: October 2019 Engineer's Report

Described below are the engineering items to be discussed at your October 16, 2019 meeting.

Subventions 2016-17 – The District submitted an application for participation in the Program in the amount of \$396,000. \$12 million has been approved for Program funding for FY 2016-17. The District submitted a final claim in the amount of \$320,706.82. We have been notified that CDFW has approved the release of funds for FY 2016-17.

Subventions 2017-18 – The District submitted an application for participation in the Program in the amount of \$565,000. \$14.5 million has been approved for Program funding for FY 2017-18. The District's final claim has been submitted in the amount of \$315,922.67. We have been notified that CDFW has approved the release of funds for FY 2017-18.

Subventions 2018-19 – The District submitted an application for participation in the Program in the amount of \$500,000. \$12 million has been approved for Program funding for FY 2018-19, consistent with recent previous years. We are working on compiling the District's final claim. The deadline for submittal is November 1.

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.

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

Special Projects – Construction of the Old River multi-benefit levee rehabilitation project continues. Teichert has completed most of the earthwork, with just finishing of the slopes and ramps remaining. Rip rap bank protection has been placed as well as aggregate base on the levee crest. Additional aggregate base will be placed on the ramps and levee crest following the replacement of siphons. Siphon replacement is in-progress and we have coordinated with Teichert, D&L Farms, and the District on scheduling. The project is on schedule and the levee rehabilitation component will be complete soon.

The enhancement component of the project will be starting soon. River Partners was the low bidder and their first priority will be to seed the slopes and apply straw and tackifier. We intend to issue Notice to Proceed later this week.

We submitted a Full Proposal for a Directed Action project to rehabilitate the north and south levees in January 2019. DWR is currently reviewing the proposal, and we have submitted a follow-up letter inquiring about the status. We have also been verbally communicating with DWR about the project.

Five Year Plan – We have received a fully executed funding agreement for the Five-Year Plan (FYP). We have started work on the Plan update and have received an advance of funds in the amount of \$26,250.00.

SB 88 – Work under Phase 2 of the measurement experiment (work plan for 2019) is progressing and coordination with the Delta Measurement Experimentation Consortium continues. No additional test sites were added during September but one more additional test site is still planned for installation at Bouldin Island Siphon No. 27. After a site visit to troubleshoot flow meters, flow measurement equipment at all 11 test sites is currently operational. Coordination with contractors is ongoing for installation and maintenance of water level sensing equipment at 4 of the test sites.

2019 siphon logs have been received for the months of July and August, collection of September logs is in progress. Portable meter testing was conducted in early September, with tests performed on several new siphons. MBK is coordinating with Dave Forkel to capture the fall/winter flooding with portable meter testing on siphons.

Site visits were conducted on Bacon Island on 9/19/19, 9/20/19, and 10/4/19 to survey siphons, conduct portable meter testing, and troubleshoot/program equipment. Site visits were conducted on Bouldin Island on 9/24/19, 9/26/19 and 10/11/19 to survey siphons, conduct portable meter testing, and download data. Survey data was collected on four site visits that include pipe slopes and landside reference elevations. Common issues still being experienced include corrosion, durability of equipment, and communication related issues.

Reclamation District No. 2028 Bacon Island

Issue Tracking Summary

10/11/2019

IssueID	Priority	Report Date	Reporter	Location	Issue Type	Description	Action	Field Notes
6	Medium	10/21/2016	Ralph Heringer	Station 275 @ Pump Station	Broken Equipment	Trash racks in need of maintenance/repair	Investigate	TBD
8	Low	11/2/2016	Dave Forkel	Station 668-702	Encroachment	Eucalyptus trees present a hazard	Investigate	Review, explore removal
36	Low	2/24/2017	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
43	Medium	4/4/2017	Brian Janowiak	Station 92-93	Seepage	Seepage existing at toe of slope, running across county road		
48	Low	6/14/2017	Dave Forkel	Station 190+00	Vegetation control	CDFW mitigation site shows evidence of arundo mowing.	Investigate	Discuss mitigation requirements.
67	Medium	6/21/2018	Andrew Reece	Station 596+50	Sloughing	Rip rap sliding down slope causing exposure to waterside slope	Monitor	Monitor for right now, repair in the near future.
67.1		6/27/2019						Rip rap placed in issue area.
70	Medium	8/2/2018	Andrew Reece	Station 336	Rodent Activity	Few sinkholes on ws slope approximately 200ft north of siphon.	Monitor	
70.1		6/27/2019						Burrows chased, re-compacted, and filled with AB.
71	Medium	8/30/2018	Michael Nishimura	Around Station 700 near South east corner of island	Rodent Activity	2 large size burrow dens	Investigate	Just down station of Juniors place, mix of rodent burrow and erosion
72	Medium	1/17/2017	Junior	West and North levees	Boil	Numerous locations along west and north levees	Monitor all boil sites; containment berms built on two most severe boils	Continue to monitor; flows seem to have receded or stopped with lower tides
73	Medium	10/21/2016	Ralph Heringer	Station 465 @ Pump Station	Broken Equipment	Trash racks in need of maintenance/repair	Investigate	TBD

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IssueID	Priority	Report Date	Reporter	Location	Issue Type	Description	Action	Field Notes
75	Medium	2/15/2019	Mike Kynett	Old River Levee @ 473+00	Erosion	W/s sloughing into crest, 1.5-foot tall head scarp, existing rock slipped	Monitor	
75.1		6/27/2019						Rip rap placed in issue area. Site within Special Projects Area.
76	Medium	2/15/2019	Mike Kynett	Old River Levee @ ~524+00	Erosion	W/s sloughing into crest, 3-foot tall head scarp	Repair	
77	Medium	2/15/2019	Mike Kynett	Old River Levee @ ~530+00	Erosion	W/s sloughing, 3-foot tall vert head scarp, not yet into crest	Monitor	
78	Medium	2/15/2019	Mike Kynett	Sante Fe Cut @ ~678+00	Erosion	W/s sloughing and cracking into crest	Monitor	
79	Medium	2/15/2019	Mike Kynett	Connection Slough Levee @ ~204+00	Erosion	W/s sloughing into crest, 2-foot tall head scarp, existing rock slipped	Repair	
79.1		6/27/2019						Rip rap placed in issue area.
80	Medium	2/15/2019	Mike Kynett	Connection Slough Levee @ ~ 262+00	Erosion	W/s sloughing	Monitor	
80.1		6/27/2019						Rip rap placed in issue area.
81	Medium	2/15/2019	Mike Kynett	Old River Levee @ ~332+00	Seepage	Report of water exiting levee during high tide	Investigate	
82	Medium	2/15/2019	Mike Kynett	Old River Levee @ ~364+00	Erosion	W/s sloughing into levee crest, 1.5-foot tall scarp	Repair	
82.1		6/27/2019						Rip rap placed in issue area. Site within Special Projects Area.

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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	
89	Low	6/27/2019	Michael Nishimura	Station 531+00	Sloughing	4 foot vert scarp, 3-4 feet from crown	Monitor	
90	Low	6/27/2019	Michael Nishimura	~Station 528+00	Sloughing	4 foot vert scarp about 4 feet from crown	Monitor	
91	Low	6/27/2019	Michael Nishimura	North of Siphon near Statiojn 530+00	Crack	Cracking along WS hinge	Monitor	
92	High	9/19/2019	Andy Reece	Sta 690+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.