

**MEMORANDUM**

March 18, 2020

**TO:** Reclamation District No. 2025

**FROM:** Nathan Hershey

**SUBJECT:** **March 2020 Engineer's Report**

Described below are the engineering items to be discussed at your March 18, 2020 meeting.

**Subventions 2018-19** – The District submitted an application for participation in the Program in the amount of \$645,000. \$12 million has been approved for Program funding for FY 2018-19, consistent with recent previous years. The District's final claim was been submitted in the amount of \$130,988.84. DWR and CDFW have performed their annual inspection and the claim is currently being processed.

**Subventions 2019-20** – The District submitted an application for participation in the Program in the amount of \$845,000. DWR has lowered the Program funding amount to \$10 million for FY 2019-20.

**Subventions 2020-21** – Applications for participation in the Program are due April 1. A draft of the application is attached. We will incorporate any final comments and submit prior to the deadline.

**Annual Maintenance** – Attached are the current maintenance items we are tracking. Ditches are currently being cleaned on the northwestern portion of the island.

**Five Year Plan** – Work on the Five-Year Plan is currently in progress. We will be distributing a draft for review and comment in the coming months. The Plan must be completed by the end of 2020.

**DWR Emergency Response Grant Update** – We are still waiting to see the final version of the Local Flood Safety Plan.

**SB 88** – Work under Phase 2 of the measurement experiment (work plan for 2019 through Feb 2020) has concluded and work under Phase 3 will soon commence. MBK is awaiting MWD comments on a draft report summarizing MBK's efforts relative to Phase 2, and then will finalize the report. Phase 3 will include the installation of new measurement devices (flange magnetic meters, channel water level sensors, and telemetry equipment) on Bacon Island, Bouldin Island, Webb Tract, and Holland Tract, on the water side of the siphons. In addition, some existing equipment will continue to be used. MBK recently obtained approval of the budget for Phase 3 and will move forward with purchasing new equipment, removing existing equipment that is no longer functioning, and relocating/repurposing existing equipment that is functional. MBK will continue to perform regular field visits to inspect the equipment and perform portable meter testing on any siphons running at the times of the visit.

On February 27th, MBK and MWD attended the quarterly Delta Measurement Consortium meeting to provide an update to the Consortium on the planned efforts for Phase 3. At the meeting, the Delta Watermaster informed the group that his office will be pursuing a Delta-wide Alternative Compliance Plan focused on Open ET; he asked for the cooperation of the Consortium in that effort. MWD and the RDs plan

to proceed with the planned Phase 3 efforts while continuing participation with the Consortium and investigating the potential use of Open ET.

## **RECLAMATION DISTRICT NO. 2025 – HOLLAND TRACT**

### **DELTA LEVEE SUBVENTIONS PROGRAM APPLICATION**

**MARCH 2020**

**TOTAL AMOUNT REQUESTED 2020–2021: \$845,000**

#### **District Summary**

The levee system surrounding Holland Tract is under the jurisdiction of Reclamation District No. 2025 (District). The District plans to perform annual maintenance on the 10.97 miles of non-project levees surrounding Holland Tract (**Sheet 1**); this includes 3.96 miles along Old River/Holland Cut, 4.60 miles along Sand Mound Slough, and 2.41 miles along Rock Slough.

The District was formed in 1918 to maintain the levee system that protects 4,060 acres of agricultural land, an estimated 10 residents<sup>1</sup>, local infrastructure, and on-island assets.

#### **Financial Information and Method of Assessment**

The District obtains revenues primarily through property assessment. The District has the ability to assess landowners up to \$319,310 each year. The District uses the assessment to pay for District operations, levee maintenance and levee rehabilitation. Assessment rates are determined by dividing the total benefit by the number of Benefit Units (BUs) in order to determine an assessment rate per BU. The base rate for the benchmark Vacant/Open Range parcel is set at \$68.40 per year per acre. Rates for other types of parcels are based upon relative replacement costs. As of June 30, 2018, the District's liabilities total \$1,053,247, see page 6 of the audit report for additional information regarding the District's long-term obligation. The District does not receive any ad valorem property tax.

#### **Work Plans**

##### **Long-Range Plan**

The District submitted its Five Year Plan to DWR in January 2011, which includes its maintenance and rehabilitation plans, target dates, cost estimate, centerline profiles and cross-sections. The District did not include a listing of encroachments. The encroachment listing is on file with the District and will be updated during the District survey. The District's goal has been, and will continue to be, to improve and maintain the levees. The District is currently updating their Five-Year Plan.

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<sup>1</sup> Contra Costa LAFCO, Directory of Local Agencies, August 2015

## **Annual Routine Maintenance Plan**

The District plans to continue its routine maintenance practices, which it has done consistently for a number of years, as evidenced by the current state of the levee system. Routine tasks include levee patrol; rodent control; all weather roadway repairs; repair of minor subsidence sloughing or slipouts; debris removal; drain and toe ditch cleaning; vegetation control; waterside slope protection; flood emergency planning and preparation; removing or modifying encroachments; surveying; engineering services; and other maintenance and permitting as needed.

The District has executed a Routine Maintenance Agreement (RMA) (#II-064-91) under Section 1600, et seq., of the California Department of Fish and Wildlife (CDFW) Code. This Agreement defines the District's maintenance work on the waterside of the levee.

District staff patrols the levee daily. The District's Superintendent conducts periodic inspections when something is found during the routine patrols. If applicable, a levee maintenance inspection report for non-project levees will be prepared for reimbursement of inspection-related expenses in accordance with the reporting guidelines provided in Appendix D of the Guidelines.

The District will exterminate burrowing rodents and fill the burrows with compacted material, on an as needed basis. As designated by CDFW, no filling of burrows in burrowing owl areas shall take place during the period of March 15 through August 15, with the exception of the filling of beaver and muskrat dens near the waterline. Application of County-permitted and restricted bait materials, or any other approved method of rodent eradication, shall be done in accordance with labeled instructions and regulations.

The District will repair, grade, and shape the levee crown as needed, so that the levee crown will maintain a uniform shape, resulting in the drainage of water equally throughout the surface, and eliminating the risk of pocketing or excessive runoff locations. Levee patrol road areas require placement of all-weather road surfacing for wet weather accessibility. Work will be performed in a manner that will keep dust to a minimum and prevent siltation from impacting the adjacent waterways. The weight and speed of all vehicles using the patrol or levee access roads shall be restricted.

A seepage/irrigation ditch is located near the levee toe extending almost the entire perimeter of Holland Tract. Typically, the seepage/irrigation ditch is 4 to 8 feet wide on top and 2 feet at bottom. The ditch depth ranges from 3 to 7 feet. For years, this ditch has been annually cleaned by removal of silt deposited at its bottom. This sediment removal is performed using an excavator to reach down into the ditch with a perforated bucket and depositing the sediment to the side. On average, any particular portion of the ditch system is cleaned every three years. Vegetation loss is insignificant and is not long-term since the process removes only sediment from the bottom of the ditch. Ditch cleaning is likely to occur in the late fall or, weather permitting, during the winter.

Vegetation control consists of four features: spraying, hand clearing, burning, and grazing. Spraying is performed using land-based equipment, typically a boom-mounted sprayer or hand sprayer. Herbicides are applied to the crown, waterside slope, and landside slope after July 1 to avoid impacts to wildlife. Noxious vegetation not controlled by spraying is removed either by District forces (hand tools, choppers, and brush hogs) or by small-scale burning. Sheep are allowed to graze on the levee periodically. This farming practice assists in the District's vegetation control.

The District's RMA for controlling vegetation on the waterside slopes includes, but is not limited to the following additional conditions:

- To protect ground nesting birds and other breeding wildlife species, herbicides may not be applied between March 15 and July 1.
- Soil sterilants may only be applied to control *Arundo donax*.
- Removal of branches, stems, and shoots of weeds, brush, berry vines, and shrubs may be removed except between March 15 and June 30.
- Except between March 15 and June 30, the District may remove trees under 2 inches and over 18 inches in diameter at diameter breast height (DBH). Roots must remain in place when removing trees under 2 inches in diameter at DBH. Removal of trees over 18 inches in diameter at DBH require special permission; if permission is granted, the roots may be removed.

The District repairs waterside erosion when required.

The District is working on an Emergency Operations Plan. In 2016, the District procured flood supplies, which the District maintains on an ongoing basis.

As needed, the District may remove, raise, or modify encroachments that endanger the levee or interfere with levee maintenance; survey the levee; and replace missing station markers to ensure there are station markers at least every one-half mile or 2,500 feet.

The routine maintenance of the levee under the jurisdiction of the District for 2020–2021 will likely consist of the following items along with the estimated cost.

<b>Annual Routine Maintenance Items</b>	<b>Estimated Cost \$</b>
Levee Patrol	60,000
Rodent Control	5,000
All Weather Road	35,000
Subsidence, Sloughing, and Slipouts	30,000
Debris Removal	10,000
Seepage Control	10,000
Clean Drains and Toe Ditches	15,000
Vegetation Control	45,000
Waterside Slope Protection	50,000
Flood planning and preparation	10,000
Remove or Modify Encroachments	350,000
Surveying	5,000
Engineering	20,000
Misc. (gates, signage, etc.)	4,000
Environmental (CDFW permits, etc.)	1,000
Repairs Required due to 2017 Storms and Runoff	90,000
<b>Total Routine Maintenance</b>	<b>\$740,000</b>

### **Rehabilitation Plan**

Multiple sites may require rehabilitation during the fiscal year. Details regarding limits of the work will be finalized prior to construction.

<b>Rehabilitation Items</b>	<b>Estimated Cost \$</b>
Rehabilitation Work	100,000
Environmental Documentation (CDFW, CEQA etc.)	5,000
<b>Total Rehabilitation</b>	<b>\$105,000</b>

### **Compliance with Applicable Laws**

The District will abide by all applicable laws including, but not limited to, labor compliance and mileage reimbursement rates.

- All work, subject to labor compliance laws, will be required to meet the Department of Industrial Relations Labor Compliance Program requirements.
- The District acknowledges that reimbursement of automobile mileage, as it relates to eligible work, will follow the prevailing Federal Standard Mileage Rate for the cost of operating an automobile.

## **Environmental Compliance**

The District has concluded that its long-range, routine maintenance practices and levee rehabilitation are Categorically Exempt under the California Environmental Quality Act (CEQA). The District will file a Notice of Exemption with Contra Costa County to that effect.

The District's work activities, for the fiscal year of the application, will be carried out in a manner consistent with the requirements set forth under California Water Code (CWC) Section 12987. The District does not anticipate habitat impacts that would result in a net long-term loss of habitat; therefore, no mitigation is planned. If habitat impacts associated with levee maintenance activities occur, the District will mitigate the impacts to meet the requirements of CWC Section 12987. The District proposes, and hereby requests, to utilize the programmatic enhancement habitat credits, if necessary. The District will comply with the net habitat improvement mandates of the CWC Section 12987.

The District's maintenance plan complies with the California Endangered Species Act, the Federal Endangered Species Act, and California Fish and Game Code § 1600 et seq., regarding Lake and Streambed Alteration Agreements.

The District's maintenance plan is consistent with the Clean Water Act, and the Rivers and Harbors Act, as administered by USACE.

Minor erosion repair may be performed under a project specific, or a RMA CDFW Streambed Alteration Agreement, and/or USACE Nationwide Permit, depending on repair requirements. All applicable parties will be informed of the activity as required.

The District will notify responsible and trustee agencies of any actions that fall within these agencies' jurisdiction as required by law.

## **Federal Disaster Assistance**

In any given year, the District's expectation is to be ready for potential emergency operations during the flood season. While the District is unable to predict the potential outcome in a given year, there is always the potential for emergency flood fighting, and subsequent levee repairs and rehabilitation. In the case that an emergency (federal, state or local) occurs, the District will properly administer the emergency and seek reimbursement for eligible expenses through all available programs including under PL 93-288. If federal assistance is unavailable, the District will coordinate with the Delta Levees Maintenance Subventions Program for possible reimbursement.



MN/ta

4275.6 SUBVENTIONS APPLICATION 2020-2021



# Reclamation District No. 2025 Holland Tract

## Issue Tracking Summary

3/16/2020

IssueID	Priority	Report Date	Reporter	Location	Issue Type	Description	Action	Field Notes
2	Medium	9/13/2016	Russ Ryan	Station 185	Crack	Crack in splash cap near leak	Monitor	Monitor; See photos
7	Medium	10/31/2016	Contra Costa County	Station 519-550	Crack	Pavement cracking on levee crown roadway; sloughing on landside hinge	Repair	NH and DF to schedule site visit and develop plan; Proposal received from Hultgren-Tillis; field work complete; geotechnical report finalized and issued
22	Low	2/10/2017	Nate Hershey	Station 545+80	Boil	Boil in landside slope	Monitor	Directed Asta to build a containment berm; Berm constructed; continue to monitor. 2/13/17 No flow coming through levee, relatively dry
25	Medium	2/13/2017	Nate Hershey	Station 105	Erosion	Erosion site	Repair	Repair; Monitor and repair when feasible
28	Low	2/18/2017	Russ Ryan	Station 315+75	Rodent Activity	Rodent Activity	Repair	Repair; Monitor and repair when feasible
60	Medium	1/18/2018	Brian Janowiak	Station 414-417	Other	Rodent activity	Monitor	Minor squirrel activity, mostly on upper LS slope. One larger void in levee crest (Sta 417) may need to be excavated.