



Water Resources ♦ Flood Control ♦ Water Rights

Item 6-ATT C

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April 15, 2019

Christine M. Crawford, AICP
Executive Officer
Yolo Local Agency Formation Commission
625 Court Street, Suite 107
Woodland CA 95695

Subject: Reorganized Reclamation District No. 537 Ability and Sufficient Revenues to Support Services

Dear Ms. Crawford:

This letter is to provide you and the Yolo Local Agency Formation Commission with information regarding ability and the financial solvency of the proposed reorganized Reclamation District (RD) 537. Reorganization of RDs Nos. 537, 785, and 827, will be contingent upon passage of a 218 election. The new property owner assessment will support operation and maintenance of the levee and internal drainage systems. The 218 election requires an Engineer's Report to determine the costs of the covered activities and benefits that each landowner would receive from the maintenance of the levee and internal drainage system. As part of that Engineer's Report, the RDs tasked MBK with developing a cost estimate to operate and maintain the levee and interior drainage system to meet current standards. This annual cost estimate was based on the budget outline developed by the California Department of Water Resources for levee Operation and Maintenance (O&M) and then modified to reflect the RDs experience with costs for maintenance activities. MBK is the District Engineer for several similar RD's and provided input on O&M costs based on past experience. Attached is the draft O&M budget that is proposed for RD 537.

Two related projects are currently in the works that effect the budget for the newly reorganized RD 537:

- 1) Construction of Lower Elkhorn Basin Levee Setback Project (LEBLS), a 7.1-mile setback levee along the Yolo Bypass

2) Design and construction of the LEBLS Interior Drainage/Pump Station Design

The LEBLS, anticipated to begin construction in 2020, will provide a new levee along 7.1 miles of the Yolo Bypass. Since the Yolo Bypass is a system feature that provides regional benefits, the Sacramento Area Flood Control Agency (SAFCA) has agreed to pay for maintenance of the new levee. The basis for this assistance are the benefits the project provides to Sacramento, West Sacramento, and rural portions of Sacramento and Yolo counties located along the Sacramento River. Between RD 537 and SAFCA, approximately \$29,000 will be spent per levee mile on maintenance. This number will be finalized this summer when the new Lower Elkhorn pump station designs are finalized.

Prior to construction of the Lower Elkhorn Project, the Bryte Landfill will be relocated to a Corrective Action Management Unit (CAMU) in the leveed area. The relocation project is on track for construction in 2019. A Reclamation District corporation yard will be constructed in 2021 on the top of the relocated Bryte Landfill CAMU. SAFCA will provide financial assistance to build the Reclamation District's corporation yard.

Please let me know if the information provided in this letter is sufficient for you to determine whether the reconstituted RD 537 will have adequate revenue to meet their levee and drainage system OMRR&R obligations. If you have any questions or need additional information, please contact Tina Anderson or me at 916-456-4400.

Sincerely,
MBK ENGINEERS



Ric Reinhardt, P.E.

TA/oh/nl
R:/4153.2/YOLO LAFCO 2019-04-15

Enclosure

cc: Tom Ramos, Reclamation District No. 537
Ross Peabody, Reclamation District No 785
Dan Ramos, Reclamation District No 827
Jim Day, Day Carter Murphy, LLP

**Lower Elkhorn Basin
Post Construction
Draft Levee O&M Estimate (10-03-2018)**

Sac R LM = 7.4
LEBLs LM = 6.3
Total Levee Miles = 13.7
Total Acres Post Construction = 4,645 (based on LWA #)

Direct Expenses Employee Salaries and Benefits		TOTAL O&M COSTS	Lower Elkhorn RDs 7.4 miles	SAFCA 6.3 Miles
Administration Salary - Annual (1- Part-time Field Superintendent - \$40,000)	\$	40,000.00	21,600.00	\$ 18,400.00
Overtime and Emergency Work - Annual [RESERVE]	\$	2,000.00	1,100.00	\$ 900.00
Trustee Compensation - Annual	\$	1,200.00	600.00	\$ 600.00
Payroll Taxes - All Inclusive - Annual	\$	5,800.00	3,100.00	\$ 2,700.00
Workers Compensation Insurance - Annual	\$	1,400.00	800.00	\$ 600.00
Unemployment Insurance - Annual	\$	800.00	400.00	\$ 400.00
Subtotal Salaries and Benefits	\$	51,200.00	\$ 27,600.00	\$ 23,600.00

Administration		TOTAL O&M COSTS	Lower Elkhorn RDs 7.4 miles	SAFCA 6.3 Miles
Accounting/Bookkeeping	\$	5,000.00	\$ 2,700.00	\$ 2,300.00
Independent Audit Consulting	\$	3,000.00	\$ 1,600.00	\$ 1,400.00
Engineering Consulting	\$	25,000.00	\$ 13,500.00	\$ 11,500.00
Legal Fees	\$	5,000.00	\$ 2,700.00	\$ 2,300.00
County and City Fees, Permits, Licenses, Assoc. Dues	\$	1,500.00	\$ 800.00	\$ 700.00
Insurance - Liability, Flood Insurance, Errors and Omissions	\$	12,000.00	\$ 12,000.00	\$ -
Insurance - Deductibles	\$	2,500.00	\$ 2,500.00	\$ -
Uninsured Losses	\$	2,000.00	\$ 2,000.00	\$ -
Computer Software and Hardware	\$	1,000.00	\$ 1,000.00	\$ -
Safety Equipment and Safety Training	\$	1,500.00	\$ 1,500.00	\$ -
Flood Fight Training	\$	250.00	\$ 250.00	\$ -
Legal Ads/Notices	\$	100.00	\$ 100.00	\$ -
Contingency Fund - 10 Year Return Period (PV = \$2,500.00 per mile)	\$	3,500.00	\$ 1,900.00	\$ 1,600.00
Subtotal Administration	\$	62,400.00	\$ 42,600.00	\$ 19,800.00

Shop and Operations		TOTAL O&M COSTS	Lower Elkhorn RDs 7.4 miles	SAFCA 6.3 Miles
Shop Supplies	\$	2,000.00	\$ 2,000.00	\$ -
Equipment Rental	\$	3,500.00	\$ 3,500.00	\$ -
Utilities - (Electric/Internet/Phone/Water/Well) - Annual	\$	3,600.00	\$ 3,600.00	\$ -
Refuse Collection - Annual	\$	800.00	\$ 800.00	\$ -
Facility Repairs - Annual	\$	1,500.00	\$ 1,500.00	\$ -
Subtotal Operations	\$	11,400.00	\$ 11,400.00	\$ -

Equipment		TOTAL O&M COSTS	Lower Elkhorn RDs 7.4 miles	SAFCA 6.3 Miles
	UTV - 10 year life cycle (based on 1 vehicle @ \$13,000 per vehicle)	\$ 1,300.00	\$ 700.00	\$ 600.00
	UTV fuel and maintenance (based on 1 vehicle @ 1,000 per vehicle per year)	\$ 1,000.00	\$ 500.00	\$ 500.00
	Utility Pickups - Car Allowance	\$ 6,000.00	\$ 3,200.00	\$ 2,800.00
	Subtotal Equipment	\$ 8,300.00	\$ 4,400.00	\$ 3,900.00

Ditch Maintenance		TOTAL O&M COSTS	Lower Elkhorn RDs	SAFCA
	Ditch Maintenance	\$ 5,000.00	\$ 5,000.00	\$ -
	Subtotal Ditch Maintenance	\$ 5,000.00	\$ 5,000.00	

Penetrations - (Total of 1 gravity) - OMRR&R		TOTAL O&M COSTS	Lower Elkhorn RDs 7.4 miles	SAFCA 6.3 Miles
	Supplies and Materials - Annual (PV = \$3,500.00) - 5 year life cycle (Total of 1 penetrations)	\$ 3,500.00	\$ 3,500.00	\$ -
	Video Inspection and/or Pressure Testing of Pipelines - 5 year life cycle (PV Day Rate = \$3,500 each) (Total of 1 penetrations)	\$ 700.00	\$ 700.00	\$ -
	Pipe Cleaning, Debris Removal 5 year life cycle (PV = \$5,000.00) (Total of 1 penetrations)	\$ 1,000.00	\$ 1,000.00	\$ -
	Subtotal Pipe Crossings	\$ 5,200.00	\$ 5,200.00	\$ -

Specific Levee OMRR&R - Lower Elkhorn Bypass Levee Setback 6.3 Miles - ROW width 385.0 feet (Includes 200 Ft. Seepage Berm) - Acres 294		TOTAL O&M COSTS	Lower Elkhorn RDs 7.4 miles	SAFCA 6.3 Miles
	Annual Levee Contract Maintenance (i.e. sheep, dragging, burning, goats, mowing) - Annual = \$2,400.00/mi	\$ 15,100.00		\$ 15,100.00
	Levee Supplies and Materials - Annual	\$ 4,000.00	\$ -	\$ 4,000.00
	Chemical - Herbicide, Sterilant, and Preemergent (Assume spray 15% of area) - Annual = \$200.00/ac	\$ 8,800.00	\$ -	\$ 8,800.00
	Rodent and Squirrel Control (Assume 15% area) - Annual = \$100.00/ac	\$ 3,000.00	\$ -	\$ 3,000.00
	Patrol Road O&M - 33,264 feet with 12' crown of Aggregate Base Top of Levee - 4 year life cycle (assumes \$30/ton plus 10K mob/demob)	\$ 72,000.00	\$ -	\$ 72,000.00
	Patrol Road O&M - 33,264 feet of Aggregate Base Landside of Levee - 15 year life cycle (assumes \$30/ton plus 10K mob/demob)	\$ 19,200.00	\$ -	\$ 19,200.00
	Fences and Gates - 15 Year Life Cycle (PV = \$6,000.00/mi)	\$ 2,500.00	\$ -	\$ 2,500.00
	Cost associated with increased recreation (vandalism to gates and locks, vehicle damage to levee, garbage)	\$ 5,000.00	\$ -	\$ 5,000.00
	Piezometer - Replacement - Total of 6 Piezometers - 50 year life cycle (PV = \$15,000 Each)	\$ 1,800.00	\$ -	\$ 1,800.00
	Piezometer - Annual O&M - Total of 6 Piezometers - 5 year life cycle (PV = \$650.00 Each)	\$ 800.00	\$ -	\$ 800.00

Piezometer - Bi-Annual Reading and Reporting - Total of 6 Piezometers - 1 year life cycle (PV = \$550.00 Each)	\$ 3,300.00	\$ -	\$ 3,300.00
Subtotal Lower Elkhorn Basin Levee Setback	\$ 135,500.00	\$ -	\$ 135,500.00

Specific Levee OMRR&R -Sacramento River West Levee 7.4 Miles - Unpaved ROW width 165.0 Feet - Acres 148	TOTAL O&M COSTS	Lower Elkhorn RDs 7.4 miles	SAFCA 6.3 Miles
Annual Levee Contract Maintenance (i.e. sheep, dragging, burning, goats, mowing) - Annual = \$2,400/mi.	\$ 17,800.00	\$ 17,800.00	\$ -
Additional Contract Labor - Annual = \$15.00/ac	\$ 2,200.00	\$ 2,200.00	\$ -
Levee Supplies and Materials - Annual = \$60.00/ac	\$ 8,900.00	\$ 8,900.00	\$ -
Equipment Rental - Annual = \$50.00/ac	\$ 7,400.00	\$ 7,400.00	\$ -
Chemical - Herbicide, Sterilant, and Preemergent (Assume spray 15% of area) - Annual = \$200.00/ac	\$ 4,400.00	\$ 4,400.00	\$ -
Rodent and Squirrel Control (Assume 15% area) - Annual = \$100.00/ac	\$ 2,200.00	\$ 2,200.00	\$ -
Patrol Road O&M - Assumes County maintains County Road on top of the levee for Units 1 for RD 537 and RD 785 - Assumes no maintenance cost along RR Track in Unit 1 of RD 827. Assumes 7,070 feet of aggregate base in RD 827. 5 year life cycle. Assumes Class II AB 3/4" at \$30/ton plus \$10K mob/demob.	\$ 16,000.00	\$ 16,000.00	\$ -
Fences and Gates - 15 year life cycle (PV = \$2,000.00/mi)	\$ 1,000.00	\$ 1,000.00	\$ -
Subtotal Sacramento River West levee	\$ 59,900.00	\$ 59,900.00	\$ -

New Consolidated Pump Station for Lower Elkhorn Basin O&M - Assume 3 Pumps	TOTAL O&M COSTS	Lower Elkhorn RDs 7.4 miles	SAFCA 6.3 Miles
Annual Pump Maintenance Contract and Repairs - 5 year life cycle (PV = \$7,500)	\$ 1,500.00	\$ 1,500.00	\$ -
Additional Contract Labor - 5 year life cycle (PV = \$2,200)	\$ 400.00	\$ 400.00	\$ -
Supplies and Materials - 1 year life cycle (PV = \$800)	\$ 800.00	\$ 800.00	\$ -
CCTV Monitoring and Security - 1 year life cycle (PV = \$1,500)	\$ 1,500.00	\$ 1,500.00	\$ -
Video Inspection and/or Pressure Testing of Pipelines - 5 year life cycle (PV = \$2,500 for 4 penetrations)	\$ 500.00	\$ 500.00	\$ -
Pipe Cleaning, Debris Removal 5 year life cycle (PV = \$5,000 for 4 pipe crossings)	\$ 1,000.00	\$ 1,000.00	\$ -
Pump Rebuild, Ceramic Coating, Bowels - 3-Pumps - 15 year life cycle (PV = \$50,000 Each)	\$ 10,000.00	\$ 10,000.00	\$ -
Motor Rebuild - 3 motors - 15 year life cycle (PV = \$8,500 each)	\$ 1,700.00	\$ 1,700.00	\$ -
Motor Control and Telemetry Upgrades - 15 year life cycle (PV = \$45,000)	\$ 3,000.00	\$ 3,000.00	\$ -
Subtotal Consolidated Pump Station	\$ 20,400.00	\$ 20,400.00	\$ -

New Consolidated Pump Station for Lower Elkhorn Basin Utility Costs	TOTAL O&M COSTS	Lower Elkhorn RDs 7.4 miles	SAFCA 6.3 Miles
Utilities - (Electric/Propane) (Estimated) - 1 year life cycle (PV= \$15,000)	\$ 15,000.00	\$ 15,000.00	\$ -
Subtotal Consolidated Pump Station	\$ 15,000.00	\$ 15,000.00	\$ -

Post Construction Totals

Item	TOTAL O&M COSTS	RD Annual O&M Cost	SAFCA Annual O&M Cost
Direct Expenses Employee Salaries and Benefits	\$ 51,200.00	\$ 27,600.00	\$ 23,600.00
Administration	\$ 62,400.00	\$ 42,600.00	\$ 19,800.00
Shop and Operations	\$ 11,400.00	\$ 11,400.00	\$ -
Equipment	\$ 8,300.00	\$ 4,400.00	\$ 3,900.00
Ditch Maintenance	\$ 5,000.00	\$ 5,000.00	\$ -
Penetrations - (1 Gravity Pipe)	\$ 5,200.00	\$ 5,200.00	\$ -
Subtotal Overhead	\$ 143,500.00	\$ 96,200.00	\$ 47,300.00
Specific Levee OMRR&R			
Lower Elkhorn Bypass East Levee Setback - 6.3 Miles	\$ 135,500.00	\$ -	\$ 135,500.00
Specific Levee OMRR&R Sacramento River West Levee - 7.4 Miles	\$ 59,900.00	\$ 59,900.00	
Subtotal Specific Levee OMRR&R	\$ 195,400.00	\$ 59,900.00	\$ 135,500.00
Consolidated New Pump Station O&M	\$ 20,400.00	\$ 20,400.00	\$ -
Consolidated New Pump Station Utility Costs	\$ 15,000.00	\$ 15,000.00	\$ -
Subtotal Pump Stations	\$ 35,400.00	\$ 35,400.00	\$ -
Subtotal	\$ 374,300.00	\$ 191,500.00	\$ 182,800.00
Reserve for Repair and Rehab (assumes 5% of annual costs)	\$ 18,740.00	\$ 9,600.00	\$ 9,140.00
Grand Total	\$ 393,040.00	\$ 201,100.00	\$ 191,940.00

SAFCA Annual Contribution			\$ 191,940.00
RD Annual Contribution		\$ 201,100.00	
Per Mile Contribution		\$ 27,175.68	\$ 30,466.67
Average Assessment/Acre		\$ 43.29	