

San Luis & Delta Mendota Water Authority

Operations & Maintenance Budget FY21/22



November 4, 2018

To: Finance & Administration Committee Members

From: Frances Mizuno, Assistant Executive Director

Subject: Proposed FY2021 and Preliminary FY2022 O&M Budgets

In preparation for our scheduled Finance & Administration Committee (FAC) meeting on November 4, 2019 at 12:00 pm, the proposed FY 2020 budget packet is included for your review.

The O&M Technical Committee on October 21, 2019 reviewed the proposed budget in detail and recommended approval of the FY2021 O&M budget to the Finance and Administration Committee for consideration as presented.

This budget includes a 2% salary adjustment placeholder. The Authority salary policy adopted in 2004 provides for salary adjustments based on salary surveys every three years and the in-between years based on Consumer Price Index (CPI) for Pacific Cities (West with less than 2,500,000 Population). A proposed salary adjustment for FY21 will be based on the CPI. The 2% placeholder in the proposed budget is based on the average of the August and September CPI which is 2.4%. The final proposed budget when presented to the Board at the January, 2020 Board Meeting for adoption will be adjusted to reflect the average CPI from August-November. This process follows the Index used for Annual Salary Adjustments Policy amended by the Board on January 5, 2006.

To meet the Strategic Plan Objective 4 for Effective Operations, Objective 4.1.1 was to complete a staff resource evaluation to determine appropriate staffing needs to support O&M. Staff realized that due to the extent and magnitude of the projects in the EO&M Ten-Year Plan, a labor resources analysis was needed to determine the appropriate labor needs to accomplish the necessary regular (PM, routine and repair) O&M and upcoming EO&M projects over the next five years and beyond. The result of the analysis shows additional staff is needed in the following areas: Engineering (2), Electric Shop (3), Machine Shop (1), and O'Neill Plant (3) mostly to support the EO&M projects for a total of nine (9) positions.

This proposed budget includes five (5) new positions and two converted positions (see justifications attached):

- Facilities O&M Director, Tracy (To support management of O&M functions)
- Contract Specialist, Tracy (To support contract preparation/management for EO&M projects)
- Electrical Project Specialist, Tracy (To support EO&M project design and inspection)
- Electrician, Tracy (To support EO&M projects)
- SCADA Technician, Tracy (To support SCADA work and for succession planning)
- Supervisor of Operational Accounting, Los Banos (conversion) (To support management of Accounting function and employee growth opportunity)
- Supervisor of Water Accounting, Los Banos (conversion) (To support management of water accounting function and employee growth opportunity)

The FY21 proposed O&M budget has a substantial increase in salaries and related benefits from the FY 20 budget and they can be explained by the following:

• Additional positions (5) -	\$682,000
• Conversion positions (2) -	\$46,000
• 2% salary adjustment placeholder -	\$465,000
• Additional pay period (27 instead of 26) -	\$300,000
• Salary related benefits (increase in positions/salaries)	\$350,000
• Health insurance (4%) -	\$50,000
• Overtime-	\$120,000
Total	\$2,013,000

The proposed FY21 total O&M Budget is \$26,257,141 compared to the FY20 budget of \$21,578,488, for an overall increase of 21.68%. Total self-funded portion paid by the water users is \$25,847,778 which is a increase of 23.13% from the FY20 budget. The RO&M portion of the budget increased by 18.33%. The EO&M portion of the budget increased by 42.6%. The Capital Improvement Project (CIP) increased by 19.7%.

Also included in the packet is an illustrative WY20 O&M rate for the Authority's self-funded portion of the rate. We have provided illustrative rates under a 40%, 50% and 75% Ag Service water supply allocation deliveries. The 75% water supply allocation rate is based on the same delivery assumptions as was used for the current WY 19 rates. Therefore, with the proposed FY21 O&M budget and the same 75% water delivery assumption, the O&M rate varies from a \$0.94/AF to \$1.64/AF increase from the WY 2019 rates.

Adjusted Routine O&M (RO&M) Budget increase of 15.59% or \$2.18M

Parts, Materials and Services (\$71K increase)

- Office Services and Supplies increased \$3.7K
 - Match actual expenditures (BU22)
- Clothing, Personal Protective Equipment (PPE) increased \$8.2K.
 - Funds for Machine Shop crew (\$6K) were inadvertently omitted from FY20 budget. Additional increase for FY21 due to proposed staff increase and increase in PPE requirements.
- Janitorial decreased \$42K
 - Decrease due to adding a Custodian position in FY20 for the Los Banos offices and O'Neill Plant in lieu of contract services
- Engineering Consultant increased \$49K.
 - Increased to utilize Engineering Consulting firms to develop accurate cost estimates for projects on 10-year plan and to assist with developing project designs and contract documents.
- Auditing decreased \$53.3K
 - One audit in FY21 vs. three in FY20

- Legal increased \$13K
 - \$5K increase for CEQA legal fees
 - \$8K increase for Human Resources legal fees (FMLA and ADA compliance)
- Fees & Licenses increased \$1.6K
 - Increase in EPA/HazMat fees
- Other Services & Expenses increased \$25.6K
 - Increase of \$8K for Authority functions (Bring you Child to Work Day, Company Picnic, Employee Appreciation Day)
 - Tuition reimbursement increase of \$1K
 - Software support agreements increase of \$3K
 - Great Plains annual maintenance increase of \$2K
 - Increase of \$11.4K for safety incentive plan, job announcement costs, and employee recognition awards
- Computer Software increased \$15.7K
 - Relay software updates, Mobile Device Management Software
- Dues – Professional & Organizational increased \$4.3K
 - Total Compensation Survey for Human Resources
- Conference & Training Costs decreased \$8.5K.
 - Department budgets have little variance for FY21
 - Decrease due to extra funds in FY20 for five-year OSHA crane operations training and certification
- Travel increased \$18.3K
 - Travel related to apprentice training and additional staff.
- Employee and Group Meetings increased \$2.5K.
 - Match actual expenditures (BU10).
- Petroleum, Oil & Lubricants increased \$21.4K
 - Increase unleaded and diesel fuel from \$3.25/gal to \$3.50/gal (\$10K increase for unleaded and \$6K increase for diesel.
- Parts and materials increased overall by \$15K.
 - Overall increase of 4% for CPI/inflation adjustment
- Outside Services for Buildings/grounds/machinery/equipment decreased \$19K
 - Decrease in BU62/Civil Maintenance to match actual average expenditures.

- Pipe, Metal, and Metal Treatments decreased \$7.2K
 - Decrease to match actual average expenditures
- Sand, Backfill & Rock decreased \$2K
 - Decrease to match actual average expenditures
- Telephone Expenses increased \$20K
 - \$5.2K increase for additional employee cellular reimbursements
 - \$8.8K increase for cellular communication upgrade from 3G to 4G on upper DMC SCADA system
 - \$3K increase for cellular phone scheduled replacements
- Computer/Network Communications increased \$14K
 - Increase bandwidth to accommodate new EAM/Finance programs
- Disposal Expense increased \$3.6K
 - Increase to match actual average expenditures

Insurance Premiums and Fees

- Increase of \$37K proposed new positions

Equipment/Capital Asset Purchases

- Increase of \$15K for new computer purchases for proposed new positions

Indirect Charges

- Overall increase of \$127K in Indirect Charges for LBAO Admin.

Extra-Ordinary O&M (EO&M)

EO&M projects budget increased by 42.6%, approximately \$1.15M. The in-house labor/benefits associated with the EO&M Projects increased by \$381K.

The increase in EO&M labor causes an offsetting, direct decrease to the RO&M budget.

Capital Improvement Projects (CIP)

CIP Project budget increased by 19.7% (\$1.03M). CIP in-house labor increased by \$359K.

SAN LUIS & DELTA-MENDOTA WATER AUTHORITY

FY2020 APPROVED, PROPOSED FY2021 & Preliminary FY2022 TOTAL BUDGET SUMMARY

O&M Budget Summary	Approved FY20 Budget	Proposed FY21 Budget	% Change 20 - 21	Preliminary FY22 Budget	% Change 21 - 22
<u>Routine O&M (Water Users)</u>	\$ 13,086,535	\$ 15,769,478	20.50%	\$ 15,889,921	0.76%
<u>USBR Funded O&M (Service Contract)</u>	\$ 586,047	\$ 409,362	-30.15%	\$ 405,875	-0.85%
<u>TOTAL</u>	\$ 13,672,581	\$ 16,178,841	18.33%	\$ 16,295,796	0.72%
<u>Extraordinary O&M (Water Users)</u>	\$ 2,692,707	\$ 3,839,900	42.60%	\$ 6,968,350	81.47%
<u>Capital Improvements Projects</u>	\$ 5,213,200	\$ 6,238,400	19.67%	\$ 7,089,600	13.64%
<u>TOTAL</u>	\$ 21,578,488	\$ 26,257,141	21.68%	30,353,746	15.60%
<u>Total Self Funded Budget</u> <u>(Water Users, BOR)</u>	\$ 20,992,441	\$ 25,847,778	23.13%	\$ 29,947,871	15.86%

San Luis & Delta-Mendota Water Authority
Notes to Support the Illustrative WY20 SLDMWA O&M Rates
FAC 11.4.19 / BOD 11.7.19

1

1 O&M Budget - Self Funded

WY20 - Fiscal Year 3/1/20-2/28/21

RO&M = \$15,085,231

1 EO&M = \$3,839,900

2 EO&M Rewind = \$500,000

2 Delivery Assumptions - Used WY19 Delivery Assumptions

Ag - 40%, 50%, and 75% scenarios

M&I - 65%, 75%, and 100% scenarios

Refuge - 100% used BOR Refuge Estimate

Exchange/Water Rights - 100%

Estimated Rescheduled Water

Pump-Ins

Miscellaneous Transfers

Mendota Pool Pumps

3 Intertie - Used WY19 Delivery Assumptions

Intertie estimated at 150,000 a/f per SLDMWA

Final cost allocation for Intertie O&M, Intertie PUE and DWR Conveyance remains undetermined.

4 Volta Wells

Not included. Costs split between DPWD and SLWD.

5 PUE SLDMWA Meters

Not included

6 DWR San Luis Joint Use

Not included

7 EO&M Funding

Funding Obligation:

1 EO&M Funding Obligation WY20 FY3/1/20 - 2/28/21 = Assume Budget = \$3,839,900

2 EO&M Rewind WY20 FY3/1/20 - 2/28/21 Obligation = \$500,000 annual BOR Repayment (Unit 6 Rewind)

8 Overall Estimated Decrease in Est. Recoverable Costs over Prior Year.

Total Estimated Recoverable Costs in Water Year 2020= \$ 19,425,131

Total Estimated Recoverable Costs in Water Year 2019= \$ (16,503,785)

Increase \$ 2,921,346

Excludes: PUE, SLJU, Intertie DWR Conveyance & Rewind Project



San Luis & Delta-Mendota Water Authority
Illustrative SLDMWA O&M Only - WY20 O&M Rates

FAC 11.4.19 / BOD 11.7.19

	A	B	C	D	E
	<u>WY 2020 Rate</u> 3/1/20-2/28/21	<u>WY 2020 Rate</u> 3/1/20-2/28/21	<u>WY 2020 Rate</u> 3/1/20-2/28/21	<u>WY 2019 Rate</u> 3/1/19-2/29/20	<u>WY20 vs. WY19</u>
	<u>Preliminary @ 40% Allocation</u>	<u>Preliminary @ 50% Allocation</u>	<u>Preliminary @ 75% Allocation</u>	<u>Current @ 75% Allocation</u>	<u>Column C vs. Column D</u> <u>@ 75% Allocation</u>
	WY2020	WY2020	WY2020	WY2019	Variance
WATER SUPPLY					
Irrigation	40%	50%	75%	75%	0%
M&I	65%	75%	100%	100%	0%
Refuge	100%	100%	100%	100%	0%
Exchange/Water Rights	100%	100%	100%	100%	0%
RATES					
Upper DMC	\$7.14	\$6.49	\$5.94	\$5.00	\$0.94
Upper DMC - Exchange/Wtr Rts	\$6.96	\$6.34	\$5.82	\$4.77	\$1.05
Lower DMC/Pool	\$9.96	\$9.28	\$8.76	\$7.55	\$1.21
Lower DMC/Pool - Exchange/Wtr Rts	\$9.78	\$9.13	\$8.64	\$7.32	\$1.32
San Felipe	\$10.53	\$9.22	\$7.94	\$6.30	\$1.64
SLC Above Dos Amigos	\$10.53	\$9.22	\$7.94	\$6.30	\$1.64
SLC Below Dos Amigos	\$10.53	\$9.22	\$7.94	\$6.30	\$1.64
San Luis Drain	\$0.21	\$0.17	\$0.13	\$0.17	(\$0.04)

Excludes: PUE, SLJU, Intertie DWR Conveyance & Rewind Project

Routine O&M Budget

Staffing Levels

and

Organization Chart

1. Staffing

Summary of Assumptions and Considerations

A. Proposed O&M positions budgeted fully or partially for FY21:

<u>Position</u>	<u>Number in FY21</u>
Accountant II	1
Accountant III	1
Accounting Technician I	3
Accounting Technician III	1
Assistant Executive Director/	
Chief Operating Officer	1
Buyer	1
C&I Technician	3
Canal Operator	2
Canal Operator, Relief/Rodent Control	1
Civil Engineer, Associate	1
Civil Maintenance Foreman	1
Civil Maintenance Planner	1
Civil Maintenance Superintendent	1
Civil Maintenance Worker	11
Contract Specialist (New)	1
Control Operator	4
Control Operator, Apprentice	1
Control Operator, Relief	1
Custodian	2
Director of Finance	1
Director of HR & Administration	1
Electrical Engineer, Junior	1
Electrical Project Specialist (New)	1
Electric Shop Foreman	1
Electrician (One new)	5
Electrician, Apprentice	2
Engineering & Planning Manager	1
Equipment Mechanic	2
Executive Director	1
Executive Secretary	1
Facilities O&M Director (New)	1
General Council	1
General Council, Deputy (Vacant)	1
HR Analyst II	1
HR Coordinator	1
Heavy Equipment Operator	4
Hydro-Electric Maintenance Planner	1
Hydro-tech I	3
Hydro-tech II	2
Inventory Control Clerk	1
IT Officer	1
Mechanical Engineer	1
Office Assistant	1
Operations & Maintenance Manager	1
Operational Accounting Supervisor*	1

<u>Position (cont.)</u>	<u>Number in FY21</u>
Operations Supervisor	1
Painter	1
Plant Engineer	1
Plant Foreman, O'Neill	1
Plant Foreman, Machine Shop	1
Plant Mechanic II	6
Plant Mechanic, Apprentice	2
Project Coordinator	1
Safety Officer	1
SCADA Engineer	1
SCADA Technician (New)	1
Secretary	1
Water Accounting Supervisor*	1
Water Operations Superintendent	1
Water Resources Specialist (Vacant)	1
Weed Control Specialist	1
Work and Asset Manager	1
Work Planning Technician	1
<u>Total Positions</u>	<u>100</u>

Denotes New Positions (5). Total positions for FY21 increasing by four due to the proposed IT Technician position that was approved for FY20, but was later deemed to be utilized through contracted services.

*Operational Accounting Supervisor converted from Accountant II

Water Accounting Supervisor converted from Accounting Technician II

(NOTE: The positions of Water Policy Director, Science Manager (Vacant), Accountant III [SJVDA], Senior Civil Engineer, Water Resources Coordinator, and Hydro-tech III are not listed in the total as they are non-O&M positions and budgeted in the Activity Budget. The positions of Executive Director, General Counsel, and Deputy General Council are budged for both O&M and Activities budgets)

- B. Routine O&M salaries will vary each year depending on the amount of staff labor dedicated to EO&M and Capital projects.
- C. Costs associated with USBR activities (Tracy Fish Collection Facility & Fish Release sites, and Delta Cross Channel) are paid directly by the USBR through a service contract. Current contract period expires 12/31/2019.

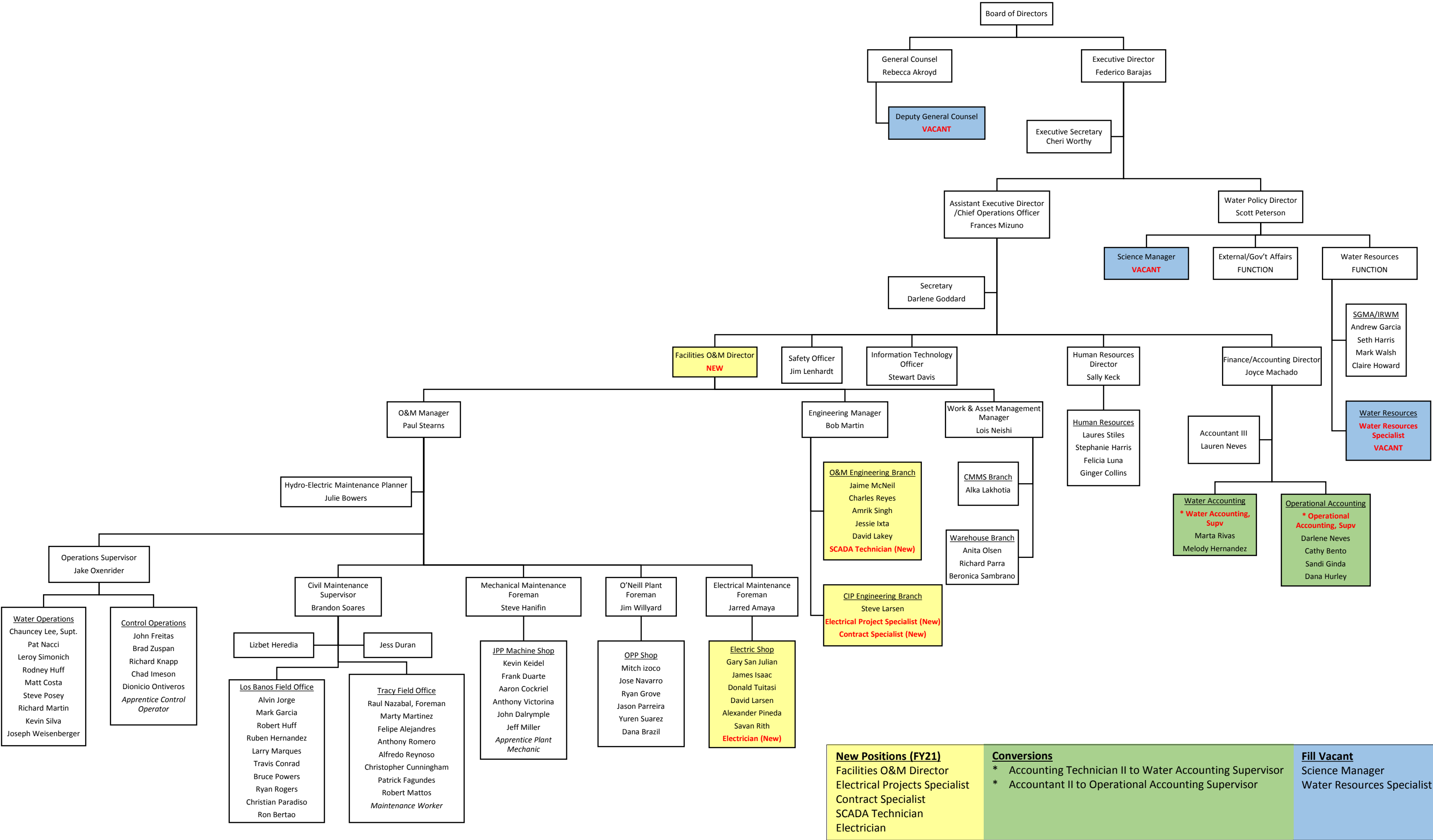
2. Materials

The Authority staff evaluates the materials and services costs annually and adjusts those costs depending on planned projects and pricing trends for given materials and services.

3. Vehicles, Equipment and Computer Acquisition

New equipment purchases in excess of \$10,000 are supported with a Cost Justification.

FY2021 (effective 3/1/2020) SLDMWA ORGANIZATION CHART



New Positions (FY21) Facilities O&M Director Electrical Projects Specialist Contract Specialist SCADA Technician Electrician	Conversions * Accounting Technician II to Water Accounting Supervisor * Accountant II to Operational Accounting Supervisor	Fill Vacant Science Manager Water Resources Specialist
--	---	---

Routine O&M Budget

FY21 Proposed Budget

Summary &

Line Item Details

Final - BOD approved X.X.XX

COLUMNS	B		C	C vs B	COMMENTS - 2021
	2020	2021			
	APPROVED BUDGET	PROPOSED BUDGET			
SLDMWA ANNUAL BUDGET ROUTINE O&M BUDGET FY21 SELF-FUNDED & USBR - FUNDED O&M ONLY	FY20	FY21			A comment is necessary for any variance greater than 5%, except all payroll related changes.
SUMMARY (no EO&M & CIP) <i>Proposed Budget</i>					
5101 Salaries	6,727,822	7,960,199	18.32%		
5102 Overtime	183,724	316,833	72.45%		
5103 Salary Adjustments	2,221,200	2,388,060	0.00%		
5141 Health Insurance - SLDWMA Contr	1,828,813	2,356,380	28.85%		
Subtotal Salaries & Employee Benefits	10,961,559	13,021,472	18.79%		
5210 Office Services & Supplies	61,150	64,850	6.05%		Increase to match actual expenditures
5211 Mailing Costs	5,620	5,800	3.20%		
5216 Small Tools	24,600	25,400	3.25%		
5221 Clothing, Personal Equip/Laundry Svcs	24,900	33,100	32.93%		Inadvertently omitted \$6k in FY20 for Machine Shop. Proposed additional staff
5226 Janitorial Supplies & Services	51,550	9,450	-81.67%		No longer contracted
5227 Engineering Consultant	115,000	164,000	42.61%		Engineering Consultants for E,O&M project design, cost estimates, and contract docs
5228 Auditing	88,800	35,500	-60.02%		Three audits in FY20, one in FY21
5229 Legal	80,000	93,000	16.25%		CEQA, HR, and contracting legal services
5231 Other Professional Services	237,300	237,000	-0.13%		
5236 Security Services/Systems	0	0	0.00%		
5237 Fees & Licenses	11,820	13,370	13.11%		Increase in EPA/HazMat fees
5241 Other Services & Expenses	199,193	224,780	12.85%		Authority functions, tuition, software support, GP annual maintenance, HR functions
5243 Computer Software	18,050	33,700	86.70%		Mobile device mgmt software, relay software updates
5245 Contract Labor	0	0	0.00%		
5246 Rents/Leases - Ofc. Machinery & Equipment	2,940	2,940	0.00%		
5247 Organizational Membership Dues	22,350	22,350	0.00%		
5251 Professional Organization Dues	1,030	5,330	417.48%		Total compensation survey/HR
5256 Conference & Training Costs	101,175	92,650	-8.43%		Decrease due to five-year OSHA crane training in FY20
5261 Travel	74,850	93,190	24.50%		Increase in apprentices and proposed additional staff
5271 Employee & Group Meetings	20,340	22,840	12.29%		Increase to match actual expenditures
5286 Parts/Materials - Vehicle/Constrct Equip	80,000	80,000	0.00%		
5288 Petroleum, Oil & Lubricants	226,570	247,950	9.44%		Increase gasoline and diesel from \$3.25/gal to \$3.50/gal
5291 Outside Services - Vehicle/Constrct Equip	58,050	62,550	7.75%		
5296 Rents/Leases - Vehicle/Constrct Equip	40,000	40,000	0.00%		
5301 Parts & Materials - Bldg/Grnds/Mach/Equip	371,384	386,484	4.07%		CPI/Inflation adjustment
5311 Outside Services - Bldg/Grnds/Mach/Equip	240,100	221,100	-7.91%		Decrease to match actual expenditures
5316 Rents/Leases - Land & Buildings	108,654	109,000	0.32%		
5331 Pipe, Metal & Treatments	43,000	35,800	-16.74%		Decrease to match actual expenditures
5341 Sand, Backfill & Rock	14,500	12,500	-13.79%		Decrease to match actual expenditures
5351 Concrete & Paving Material	20,000	20,000	0.00%		
5361 Chemicals	132,400	132,600	0.15%		
5372 Telephone Expenses	84,733	104,735	23.61%		Cellular phone reimbursements, cellular upgrade for upper DMC SCADA
5373 Energy	72,620	69,600	-4.16%		
5374 Radio Communications	0	0	0.00%		
5375 Network Communications	60,756	74,756	23.04%		Increase bandwidth to accommodate new EAM/Finance programs
5376 Hazardous Waste Disposal	22,100	22,500	1.81%		
5377 Disposal Expense	29,620	33,200	12.09%		Increase to match actual expenditures
Subtotal Services & Supplies	2,745,155	2,832,025	3.16%		
5401 Insurance Premiums & Fees	198,522	235,800	18.78%		Increase for proposed additional staff
Subtotal Other Charges	198,522	235,800	18.78%		
5521 New/Replacement Equipment & Furniture	48,140	47,540	-1.25%		
5523 Computer Hardware	9,800	24,500	150.00%		Increase for proposed additional staff
5526 Water Meters	18,000	18,000	0.00%		
5541 Automotive & Light Trucks	0	0	0.00%		
5544 Heavy Equipment	0	0	0.00%		
5561 Construction Equipment/Payment	0	0	0.00%		
Subtotal Capital Assets	75,940	90,040	18.57%		
TOTAL ROUTINE O&M BUDGET	13,981,176	16,179,337	15.72%		
Less:					
Allocated indirect charged to EO&M Reserve	-308,594	-684,743	121.89%		
Allocated indirect charged to PAT Grants	0	0	0.00%		
Allocated Indirect charged to CIP & Other Funds	0	0	0.00%		
ADJUSTED ROUTINE O&M BUDGET TOTAL	13,672,582	15,494,594	13.33%		

RO&M BUDGET FY 2021 LINE ITEM DETAIL

	100.00%																					
	11,963,203.87	10.85%													0.00%	31.30%	0.71%	0.88%	14.93%	0.51%	0.74%	13.52%
SOLDMWA ANNUAL BUDGET SUMMARY DETAIL OF ALL DEPTS	Total including EO&M PAT GRANTS, & USBR	FUND 26 EO&M Total	Fund 26 EO&M Project D0 Computers	Fund 26 EO&M Project D1 Vehicles	Fund 26 EO&M Project D2 H/Equip	Fund 26 EO&M Project D3 Facilities Infru	Fund 26 EO&M Project E6 O&M Road	Fund 26 EO&M Project F7 Arc Flash Study	Fund 26 EO&M Project G3 Main Trans Rehab	Fund 26 EO&M Project F4 Unit Rwnd(U1&4)	Fund 26 EO&M Project I3 Sub Mitigation	Fund 26 EO&M Project I4 Brdg Abutment	Fund 26 EO&M Project I6 DMC Flowmeter	Fund 26 EO&M Project I7 EAM&Fin Software	FUND 25 USBR/ CIP F4	02 Maint DMC	04 O&M W/W	05 O&M Mendota Pool	11 JPP	12 Intertie Maintenance	13 Volta Wells Pumping	19 ONP
R, O & M																						
5101 - Salaries	9,180,526.03	1,220,327.09	0.00	0.00	0.00	0.00	33,663.50	53,028.71	33,213.73	973,991.84	40,021.56	86,407.75	0.00	0.00	0.00	2,815,901.18	63,721.05	78,554.29	1,299,712.06	45,163.98	67,169.77	1,184,585.70
5102 - Overtime	394,618.15	77,784.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77,784.95	0.00	0.00	0.00	0.00	0.00	84,325.11	2,211.65	3,075.20	96,552.63	2,597.55	1,442.66	77,739.50
5103 - Salary Related Benefits	2,388,059.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	844,770.35	19,116.31	23,566.29	389,913.62	13,549.19	20,150.93	355,375.71
5141 - Health Insurance	2,356,380.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	846,247.39	19,738.11	32,706.99	465,827.55	15,230.37	12,231.29	313,677.09
Total Salary Related	14,319,584.32	1,298,112.04	0.00	0.00	0.00	0.00	33,663.50	53,028.71	33,213.73	1,051,776.79	40,021.56	86,407.75	0.00	0.00	0.00	4,591,244.03	104,787.12	137,902.77	2,252,005.86	76,541.10	100,994.64	1,931,378.00
5210 - Office Svcs & Supp.	64,850.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6,350.00	0.00	0.00	1,550.00	0.00	0.00	1,050.00
5211 - Mailing Costs	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00	0.00	0.00	0.00
5216 - Small Tools	25,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8,600.00	0.00	200.00	9,200.00	0.00	0.00	6,100.00
5221 - Clothing, Pers Equip.	33,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12,200.00	0.00	300.00	13,800.00	0.00	0.00	5,000.00
5226 - Janitorial Svcs & Supplies	9,450.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	400.00	0.00	0.00	50.00	0.00	0.00	800.00
5227 - Engineering Consult.	164,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30,000.00	0.00	0.00	50,000.00	4,500.00	0.00	69,500.00
5228 - Auditing	35,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5229 - Legal	93,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5231 - Other Professional Svcs.	8,048,891.44	1,573,491.44	0.00	0.00	0.00	0.00	136,461.44	132,230.00	75,000.00	0.00	500,000.00	82,500.00	260,000.00	387,300.00	6,238,400.00	18,000.00	1,000.00	0.00	28,500.00	0.00	0.00	2,500.00
5237 - Fees & Licenses	13,370.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9,000.00	0.00	0.00	600.00	0.00	0.00	1,000.00
5241 - Other Services & Expenses	224,780.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19,800.00	0.00	0.00	9,200.00	7,800.00	0.00	17,100.00
5243 - Computer Software & Parts < \$1000. Each	33,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7,200.00	0.00	0.00	2,500.00	0.00	0.00	0.00
5245 - Contract Labor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5246 - Rents/Leases - Office Machines & Equipment	2,940.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5247 - Organizational Membership	22,350.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5251 - Dues - Prof. & Org.	5,330.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5256 - Conference/ Training	92,650.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22,700.00	0.00	0.00	40,750.00	0.00	0.00	4,000.00
5261 - Travel	93,190.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23,595.00	0.00	0.00	36,345.00	0.00	0.00	10,225.00
5271 - Employee & Group Mtgs.	22,840.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,800.00	0.00	0.00	900.00	0.00	0.00	400.00
5286 - Vehicle Parts & Materials	80,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5288 - Petroleum, Oil & Lubricants	247,950.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	245,650.00	0.00	0.00	0.00	0.00	0.00	300.00
5291 - Outside Services - Vehicles & Constr. Equip	62,550.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5296 - Rents/Leases - Vehicle & Construction Equipment	40,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5301 - Parts/Material-Bldg, Grounds, Mach. & Equip.	386,484.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	168,000.00	6,200.00	2,600.00	71,200.00	23,500.00	3,600.00	61,700.00
5311 - Outside Serv.-Bldg, Grounds, Mach. & Equip.	391,100.00	170,000.00	0.00	0.00	0.00	170,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	75,600.00	0.00	0.00	47,700.00	21,500.00	0.00	19,800.00
5316 - Rents/Leases - Land & Bldg.	109,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5331 - Pipe, Metal & Treatments	35,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20,000.00	1,500.00	0.00	10,500.00	800.00	0.00	2,000.00
5341 - Sand, Backfill and Rock	12,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5351 - Concrete & Paving Mat.	34,500.00	14,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14,500.00	0.00	0.00	0.00	20,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5361 - Chemicals	132,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112,300.00	1,050.00	0.00	3,700.00	1,700.00	0.00	2,050.00
5372 - Telephone Expenses	104,735.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40,240.00	0.00	0.00	11,560.00	0.00	0.00	5,880.00
5373 - Energy	69,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5374 - Radio Communication	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5375 - Computer Comm.	74,756.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10,000.00
5376 - Hazardous Waste Disposal	22,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13,400.00	0.00	0.00	7,100.00	0.00	0.00	2,000.00
5377 - Disposal Expenses	33,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8,800.00	500.00	0.00	14,600.00	0.00	0.00	2,500.00
5401 - Insurance Premiums and Fees	235,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5521 - New/Replacement Equip. & Furniture	47,540.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3,200.00	0.00	0.00	9,000.00	0.00	0.00	2,000.00
5523 - Computer Hardware	137,500.00	113,000.00	113,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5526 - Water Meters	18,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13,000.00	0.00	5,000.00	0.00	0.00	0.00	0.00
5541 - Vehicles & Constr. Equip	96,600.00	96,600.00	0.00	96,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5544 - Heavy Equipment	573,700.00	573,700.00	0.00	0.00	573,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total All Other Expenses	11,937,556.44	2,541,291.44	113,000.00	96,600.00	573,700.00	170,000.00	136,461.44	132,230.00														

RO&M BUDGET FY 2021 LINE ITEM DETAIL

Labor & % of total labor

	100.00%															
	11,963,203.87	1.39%	0.04%	0.11%	0.52%	0.13%	1.13%	2.87%	2.45%	1.24%	11.66%	89.15%	87.48%	1.67%		
SOLDMWA ANNUAL BUDGET SUMMARY DETAIL OF ALL DEPTS	Total including EO&M PAT GRANTS, & USBR	30 Maint TFF	32 Maint Fish Rel/Site	33 Maint USBR Bldg/Grnds	41 SLD	44 O&M Delta X-Chnl	52 Ware- housing	54 TFO Exp.	56 Direct O&M	57 Indirect O&M	58 O&M LBAO Admin	FY21 TOTAL DMC	FY21 TOTAL SELF FUNDING	FY21 TOTAL BUREAU FACILITIES	FY20 TOTAL DMC	% Change FY20 vs FY21 DMC
R, O & M																
5101 - Salaries	9,180,526.03	123,619.93	3,371.61	9,870.02	47,073.02	11,953.41	103,369.16	253,363.06	681,728.27	113,006.21	1,058,036.23	7,960,198.94	7,811,383.97	148,814.97	6,727,821.99	18.32%
5102 - Overtime	394,618.15	5,259.60	262.30	873.40	1,550.80	348.00	1,051.81	14,496.67	4,745.48	1,000.60	19,300.26	316,833.20	310,089.90	6,743.30	183,723.68	72.45%
5103 - Salary Related Benefits	2,388,059.68	37,085.98	1,011.48	2,961.01	14,121.91	3,586.02	31,010.75	76,008.92	204,518.48	33,901.86	317,410.87	2,388,059.68	2,343,415.19	44,644.49	2,221,200.06	7.51%
5141 - Health Insurance	2,356,380.45	41,856.21	1,376.72	5,229.28	16,750.41	3,692.15	29,100.38	81,147.69	171,152.73	17,322.46	283,093.63	2,356,380.45	2,304,226.10	52,154.36	1,828,812.90	28.85%
Total Salary Related	14,319,584.32	207,821.72	6,022.12	18,933.70	79,496.13	19,579.58	164,532.10	425,016.34	1,062,144.95	165,231.13	1,677,840.99	13,021,472.28	12,769,115.16	252,357.12	10,961,558.63	18.79%
5210 - Office Svcs & Supp.	64,850.00	0.00	0.00	0.00	0.00	0.00	300.00	11,200.00	6,900.00	33,600.00	3,900.00	64,850.00	64,850.00	0.00	61,150.00	6.05%
5211 - Mailing Costs	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	700.00	4,200.00	550.00	5,800.00	5,800.00	0.00	5,620.00	3.20%
5216 - Small Tools	25,400.00	0.00	0.00	0.00	0.00	0.00	500.00	300.00	500.00	0.00	0.00	25,400.00	25,400.00	0.00	24,600.00	3.25%
5221 - Clothing, Pers Equip.	33,100.00	0.00	0.00	0.00	0.00	0.00	700.00	0.00	900.00	0.00	200.00	33,100.00	33,100.00	0.00	24,900.00	32.93%
5226 - Janitorial Svcs & Supplies	9,450.00	0.00	0.00	0.00	0.00	0.00	0.00	6,700.00	0.00	0.00	1,500.00	9,450.00	9,450.00	0.00	51,550.00	-81.67%
5227 - Engineering Consult.	164,000.00	0.00	0.00	0.00	0.00	0.00	0.00	10,000.00	0.00	0.00	0.00	164,000.00	164,000.00	0.00	115,000.00	42.61%
5228 - Auditing	35,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35,500.00	35,500.00	35,500.00	0.00	88,800.00	-60.02%
5229 - Legal	93,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15,000.00	0.00	73,000.00	93,000.00	93,000.00	0.00	80,000.00	16.25%
5231 - Other Professional Svcs.	8,048,891.44	0.00	0.00	0.00	1,000.00	0.00	0.00	0.00	94,000.00	0.00	92,000.00	237,000.00	237,000.00	0.00	237,300.00	-0.13%
5237 - Fees & Licenses	13,370.00	0.00	0.00	0.00	0.00	0.00	0.00	1,000.00	750.00	0.00	1,020.00	13,370.00	13,370.00	0.00	11,820.00	13.11%
5241 - Other Services & Expenses	224,780.00	0.00	0.00	0.00	0.00	0.00	1,100.00	18,400.00	64,500.00	3,780.00	83,100.00	224,780.00	224,780.00	0.00	199,193.00	12.85%
5243 - Computer Software & Parts < \$1000. Each	33,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23,200.00	0.00	800.00	33,700.00	33,700.00	0.00	18,050.00	86.70%
5245 - Contract Labor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
5246 - Rents/Leases - Office Machines & Equipment	2,940.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,940.00	0.00	2,940.00	2,940.00	0.00	2,940.00	0.00%
5247 - Organizational Memebership	22,350.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22,350.00	22,350.00	22,350.00	0.00	22,350.00	0.00%
5251 - Dues - Prof. & Org.	5,330.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,000.00	0.00	4,330.00	5,330.00	5,330.00	0.00	1,030.00	417.48%
5256 - Conference/ Training	92,650.00	0.00	0.00	0.00	0.00	0.00	300.00	0.00	9,900.00	0.00	15,000.00	92,650.00	92,650.00	0.00	101,175.00	-8.43%
5261 - Travel	93,190.00	0.00	0.00	0.00	0.00	0.00	200.00	0.00	14,825.00	0.00	8,000.00	93,190.00	93,190.00	0.00	74,850.00	24.50%
5271 - Employee & Group Mtgs.	22,840.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	100.00	7,140.00	12,400.00	22,840.00	22,840.00	0.00	20,340.00	12.29%
5286 - Vehicle Parts & Materials	80,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80,000.00	80,000.00	0.00	80,000.00	0.00%
5288 - Petroleum, Oil & Lubricants	247,950.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,500.00	0.00	500.00	247,950.00	247,950.00	0.00	226,570.00	9.44%
5291 - Outside Services - Vehicles & Constr. Equip	62,550.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,000.00	0.00	2,050.00	62,550.00	62,550.00	0.00	58,050.00	7.75%
5296 - Rents/Leases - Vehicle & Construction Equipment	40,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40,000.00	40,000.00	0.00	40,000.00	0.00%
5301 - Parts/Material-Bldg, Grounds, Mach. & Equip.	386,484.00	7,900.00	0.00	0.00	1,000.00	0.00	2,100.00	37,200.00	400.00	84.00	1,000.00	386,484.00	378,584.00	7,900.00	387,384.00	-0.23%
5311 - Outside Serv.-Bldg, Grounds, Mach. & Equip.	391,100.00	5,500.00	0.00	0.00	0.00	38,000.00	0.00	13,000.00	0.00	0.00	0.00	221,100.00	177,600.00	43,500.00	240,100.00	-7.91%
5316 - Rents/Leases - Land & Bldg.	109,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109,000.00	109,000.00	109,000.00	0.00	108,654.00	0.32%
5331 - Pipe, Metal & Treatments	35,800.00	0.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	35,800.00	35,800.00	0.00	43,000.00	-16.74%
5341 - Sand, Backfill and Rock	12,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12,500.00	12,500.00	0.00	14,500.00	-13.79%
5351 - Concrete & Paving Mat.	34,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20,000.00	20,000.00	0.00	20,000.00	0.00%
5361 - Chemicals	132,600.00	0.00	0.00	0.00	11,200.00	0.00	0.00	600.00	0.00	0.00	0.00	132,600.00	132,600.00	0.00	132,400.00	0.15%
5372 - Telephone Expenses	104,735.00	0.00	0.00	0.00	0.00	0.00	1,280.00	11,560.00	16,635.00	11,760.00	5,820.00	104,735.00	104,735.00	0.00	84,733.00	23.61%
5373 - Energy	69,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10,600.00	69,600.00	69,600.00	0.00	72,620.00	-4.16%
5374 - Radio Communication	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
5375 - Computer Comm.	74,756.00	0.00	0.00	0.00	0.00	0.00	0.00	64,000.00	0.00	756.00	0.00	74,756.00	74,756.00	0.00	60,756.00	23.04%
5376 - Hazardous Waste Disposal	22,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22,500.00	22,500.00	0.00	22,100.00	1.81%
5377 - Disposal Expenses	33,200.00	0.00	0.00	0.00	500.00	0.00	3,100.00	0.00	0.00	0.00	3,200.00	33,200.00	33,200.00	0.00	29,620.00	12.09%
5401 - Insurance Premiums and Fees	235,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5,300.00	0.00	230,500.00	235,800.00	235,800.00	0.00	198,522.00	18.78%
5521 - New/Replacement Equip. & Furniture	47,540.00	0.00	0.00	0.00	0.00	0.00	1,000.00	4,500.00	9,000.00	11,640.00	7,200.00	47,540.00	47,540.00	0.00	48,140.00	-1.25%
5523 - Computer Hardware	137,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22,000.00	0.00	2,500.00	24,500.00	24,500.00	0.00	9,800.00	150.00%
5526 - Water Meters	18,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18,000.00	18,000.00	0.00	18,000.00	0.00%
5541 - Vehicles & Constr. Equip	96,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
5544 - Heavy Equipment	573,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
Total All Other Expenses	11,937,556.44	13,400.00	0.00	0.00	14,700.00	38,000.00	10,680.00	178,460.00	288,110.00	75,900.00	726,020.00	3,157,865.00	3,106,465.00	51,400.00	3,035,617.00	4.03%
Grand Total	26,257,140.76	221,221.72	6,022.12	18,933.70	94,196.13	57,579.58	175,212.10	603,476.34	1,350,254.95	241,131.13	2,403,860.99	16,179,337.28	15,875,580.16	303,757.12	13,997,175.63	15.59%

Routine O&M Budget

FY21 Proposed

Staffing Justifications

Staff Labor Analysis Summary by Crew

Work Crew	Current Staff level	Required Regular O&M Only Employee Productivity Hours (EPH)	Total Required EPH to complete Regular maintenance and E,O&M projects				
			2021	2022	2023	2024	2025
Civil Maint - Los Banos	11	11.1	11.9	11.7	11.8	11.6	11.7
Civil Maint - Tracy	8	8.1	8.1	8.1	8.1	8.1	8.1
Canal Operations	8	8.3					
Engineering	7	6.3	8.2	8.5	9.7	10.1	10.0
Electric Shop	6	7.6	9.1	9.5	9.3	10.1	9.1
Machine Shop	7	6.8	8.2	7.8	8.3	9.7	7.4
O'Neill Plant	5	6.0	8.5	8.6	9.3	9.0	7.2
Control Operations	6	6.8					

Staff Labor Analysis Summary by Crew

Notes	Regular O&M hours are based on the average hours for Repairs and Routine for FY17, FY18, and FY19 plus estimated PM hours. Staff believes this is the baseline maintenance required to keep the facilities in satisfactory condition.
	Routine Work: Maintenance activities that are routine in nature, i.e. plant and canal inspections, trash collection, grading, weed control, etc.
	Repair Work: Maintenance activities that involve returning the equipment to normal operations. Typically involves troubleshooting, examinations, then removal and replacement of failed components.
	Preventive Maintenance (PM): Maintenance activities that involve inspections and tests that evaluate the condition of equipment and determines if additional work is necessary or the equipment is satisfactory to operate until the next maintenance cycle.
	Employee Productivity Hours - EPH: To better evaluate labor hours, staff has developed a value for Productive Labor Hours. It is 2,080 hours minus 96 hours Holiday, 100 hours Vacation, 60 hours Sick, 164 hours of Safety & Technical training. Therefore, staff has used 1,660 hours annually as the value to determine the proper staffing levels to meet the maintenance requirements
	SCADA, Electrician and C&I hours to complete the outstanding work tasks were estimated and added as part of the calculation for necessary repair work. This work is estimated to be completed over 3 years. The SCADA hours were added to the ESHOP, and the C&I and Electrician were divided between ESHOP and O'Neill according to the project locations.

STAFFING JUSTIFICATION FORM
FY 2021

PRIORITY CODE: - -

EXPENSE CODE: 5101
BUDGET UNIT:

Type of Purchase

<input type="checkbox"/>	Materials
<input type="checkbox"/>	Services
<input checked="" type="checkbox"/>	Other: <u>Request for New Position</u>

PROJECT DESCRIPTION:
GENERAL SPECIFICATIONS:
(See attached information)

New Position(s):
Facilities O&M Director

ESTIMATED COST

Salary Cost:	\$188,700
Benefits, etc.:	\$56,610
Estimated Cost:	\$245,310

CURRENT O&M COST INFORMATION

:
:
:

Description of current circumstances that drive this request:

The current Assistant Executive Director manages the overall O&M and administrative functions with six direct reports: O&M Manager, Engineering and Planning Manager, Asset and IT Manager, HR Director, Safety Engineer and Finance Director. In addition to this responsibility, special projects/program are also managed/performed by this position. These projects/programs include: water transfers, storage project investigation, San Luis Transmission Project, among others. In order to better align the work/responsibilities, it is proposed that a new Facilities O&M Director position be established to directly oversee the daily management of O&M and Engineering. This position will report directly to the new Chief Operating Officer (COO). With the aging facilities, the O&M function, including EO&M projects, are ever increasing. It is imperative the Authority's focus remains on long term sustainability in order to direct and guide staff to ensure all necessary work, growth, and efficiencies are achieved. This position, with direct oversight of O&M and Engineering functions will allow the COO to focus on the administrative functions: finance, accounting, human resources, safety and IT, and to allow sufficient time to better manage special projects. With ever increasing regulatory compliance issues, the entirety of the work is more complicated. Further, with the increasing EO&M projects, additional funding sources will be required which necessitates the need for the Authority to explore other financing instruments for O&M. This task alone will require extensive time and effort by the COO to manage in the near future.

Description of how this request would change current circumstances:

Increasing the O&M management staff will allow for increased oversight of all work functions and better align and distribute the management functions and allow managers to focus on managing instead of being "working" managers

**STAFFING JUSTIFICATION FORM
FY 2021**

PRIORITY CODE: - -

EXPENSE CODE: 5101

BUDGET UNIT: 60

Type of Purchase

<input type="checkbox"/>	Materials
<input type="checkbox"/>	Services
<input checked="" type="checkbox"/>	Other: <u>Request for New Position</u>

PROJECT DESCRIPTION:
GENERAL SPECIFICATIONS:
(See attached information)

New Position(s): **Contract Specialist**

ESTIMATED COST

Salary Cost:	\$103,846
Benefits, etc.:	\$31,154
Estimated Cost:	\$135,000

CURRENT O&M COST INFORMATION

:
:
:

Description of current circumstances that drive this request:

Due to the increasing scope/complexity and quantity of construction, consultant and service type contracts necessary for contract work and the different legalities associated with each type of contract, a Contract Specialist position is needed to ensure the SLDMWA contracting policy and procedures provide the best protection for the SLDMWA. This new position will be responsible for the following:

- Developing the appropriate general terms and conditions for each contract issued
- Preparing the final contract documents after the technical specifications have been developed
- Managing pre-award activities. (i.e., Advertising, bidding process, bid selection process, contract negotiation, general terms and conditions review and negotiation, contract bond review/approval, insurance review/approval, contract execution, etc.)
- Managing all contract administrative procedures (i.e., RFI's, CO's, progress payments, budget management, administrative contract issues, claims, final acceptance and contract close-out procedures, warranty work, etc.)

Currently, each of these activities are performed either by the project engineer or the Information Systems/Asset Manager. This additional position will provide in-house expertise in all contracting requirements and risk management. With this in-house expertise, the engineer's role in this process will be reduced and free them up to provide the necessary technical O&M support and design services of the Department.

The age of the SLDMWA facilities has increased the amount of rehabilitation and modernization work that is necessary to keep them reliable. This work is performed either by in-house forces or by contract. This additional position will reduce the number of administrative hours the engineers are currently dedicating to contract administration and free them up to perform other Engineering & Planning Department RO&M and EO&M program responsibilities. The Department responsibilities that will benefit from these additional hours are as follows:

- Construction contract and O&M activity field engineering/inspection support
- Future EO&M project scope planning and cost estimating
- USBR RO&M recommendation planning and estimating
- DMC & Wasteway bridge inspection program
- DMC & Wasteway right of way trespass management
- Grant application & management

Description of how this request would change current circumstances:

With the addition of a Contract Specialist to the Engineering & Planning Department staff, the SLDMWA will have an in-house expert in contracting laws and procedures. The Contract Specialist will perform all administrative work associated with the contracts issued by the Department. This work is currently being performed by the project engineers. By reducing the number of hours the engineer spends on contract administration, it will increase the hours the engineer will spend on other Department responsibilities.

**STAFFING JUSTIFICATION FORM
FY 2021**

PRIORITY CODE: - -

EXPENSE CODE: 5101

BUDGET UNIT: 60

Type of Purchase

<input type="checkbox"/>	Materials
<input type="checkbox"/>	Services
<input checked="" type="checkbox"/>	Other: <u>Request for New Position</u>

PROJECT DESCRIPTION:
GENERAL SPECIFICATIONS:
(See attached information)

New Position(s): **Electrical Projects Specialist**

ESTIMATED COST

Salary Cost:	\$123,639
Benefits, etc.:	\$ 37,092
Estimated Cost:	\$160,731

CURRENT O&M COST INFORMATION

:
:
:

Description of current circumstances that drive this request:

In the interest of meeting the objective in Goal Area #4 of the Board-adopted Strategic Plan; completion of a staff resource evaluation to determine staffing needs, the results of the staffing analysis identified that the current staffing level of the Engineering and Planning Department was sufficient to meet the demands of the regular O&M activities with additional resources required to properly support the EO&M projects on the SLDMWA 10-Year Plan. Due to the rehabilitation and modernization needs of the aging facilities, the scope and quantity of electrical related extra-ordinary projects has increased to a level that requires additional staffing to manage the projects.

Currently, there are several projects that Reclamation is providing design services and technical support and they are as follows:

- JPP Excitation & Control System Refurbishment Design
- JPP Unit Rewind Technical Support
- JPP Unit Breaker Replacement Design
- JPP Current Transformer (CT) Upgrades Design

Each of these projects require significant O&M impact review and support coordination, as well as, overall project management activities that are currently being deferred due to the regular O&M demands. The Safety Engineer, Jim Lenhardt, provides some supplemental project management support for these projects, when time permits.

Over the next 4 years, there are several projects on the SLDMWA 10-year plan that require a significant amount of project management activities associated with electrical engineering (or USBR) consulting services for the design and technical services on the following projects:

- OPP - Electrical Equipment Periodic Reviews (required every 5 years)
- OPP - Main Transformer Rehabilitation Design
- TFO/LBFO/DCI Arc Flash Study (required every 5 years)
- OPP - WECC Testing by USBR Denver Office (required every 5 years)
- JPP – Arc Flash Study (required every 5 years)

To provide the necessary support for all of the above projects, as well as, future projects on the 10-year Plan, and to minimize the impact to regular O&M support, additional resources are required.

Description of how this request would change current circumstances:

With the additional support provided by this position, the Engineering & Planning Department will have the appropriate resources to properly manage the electrical engineering and electrical project/contract management activities for both the regular O&M and EO&M programs. With this additional position, the technical support and project management activities for the EO&M projects can be properly performed with little-to-no impact to the regular O&M activities.

**STAFFING JUSTIFICATION FORM
FY 2021**

PRIORITY CODE: - -

EXPENSE CODE: 5101

BUDGET UNIT: 51

Type of Purchase

<input type="checkbox"/>	Materials
<input type="checkbox"/>	Services
<input checked="" type="checkbox"/>	Other: <u>Request for New Position</u>

PROJECT DESCRIPTION:

GENERAL SPECIFICATIONS:

(See attached information)

New Position(s): Electrician-Tracy

ESTIMATED COST

Salary Cost: \$91,635.33

Benefits, etc.: \$27,490.60

Estimated Cost: **\$119,125.93**

CURRENT O&M COST INFORMATION

:
:
:

Description of current circumstances that drive this request:

In the interest of meeting the objective in Goal Area #4 of the Board-adopted Strategic Plan; completion of a staff resource evaluation to determine staffing needs, it has been determined that there are several circumstances that point to the need of an additional Electrician in the Tracy Electric Shop.

The Authority completed an O&M Labor Analysis to determine the resources necessary to perform necessary preventive maintenance, routine, repair and EO&M Project work (See attached report). In order to support the necessary electrical/C&I related work, there is a need for nine positions. The current staffing consists of the Electrical Foreman, two C&I Technicians, two journeyman Electricians, one second-year Apprentice Electrician, and one first-year Apprentice Electrician for a total of seven positions. As the apprentice electricians reach into their 3rd and 4th years, the classroom training requirements are reduced and it is expected more on-the-job time will be gained to support necessary work. Therefore, one additional Electrician position is requested for FY21.

The Electrical Department was understaffed for over two years with three or less employees due to long-term illnesses, retirements and employees leaving the Authority. This was recognized by the Committees and Board and an electrician position was added in FY 2017. However, even with the additional electrician, approximately 72% of the Preventative Maintenance (PM) Work Orders for the Jones Pumping Plant, DMC, and DCI are still backlogged over the last three fiscal years due to the need to support the ever increasing EO&M project needs. Several major projects severely impacted the electrical crew's ability to perform the PM work: Providing support for the O'Neill Main Unit Rehabilitations, and the Jones Unit Motor Rewind Project. These major projects will continue along with other upcoming E, O&M projects such as arc flash study support for all plants and facilities, WECC testing support, and the Jones unit excitation system and controls upgrade. The C&I's have assisted with electrical repairs and PM's which causes delays and setbacks on C&I related work and projects.

Description of how this request would change current circumstances:

The addition of one Journeyman Electrician to the staff would allow for:

- More completion of PM work orders
- Provide better support for E, O&M Projects
- Less burden placed on the C&I's to support electrical work
- Provide additional support for development of the Apprentice Electrician's skills

STAFFING JUSTIFICATION FORM
FY 2021

PRIORITY CODE: - -

EXPENSE CODE: 5101
BUDGET UNIT: 40/50

Type of Purchase

<input type="checkbox"/>	Materials
<input type="checkbox"/>	Services
<input checked="" type="checkbox"/>	Other: <u>Request for New Position</u>

PROJECT DESCRIPTION:
GENERAL SPECIFICATIONS:
(See attached information)

New Position(s): SCADA Technician

ESTIMATED COST

Salary Cost:	\$99,579.55
Benefits, etc.:	\$29,873.87
Estimated Cost:	\$129,453.42

CURRENT O&M COST INFORMATION

:
:
:

Description of current circumstances that drive this request:

In the interest of meeting the objective in Goal Area #4 of the Board-adopted Strategic Plan; completion of a staff resource evaluation to determine staffing needs, it has been determined that there are several circumstances that point to the need of a full time SCADA Technician to work alongside with the current SCADA Engineer.

The Supervisory Control and Data Acquisition (SCADA) system began with the Jones Pumping Plant unit control and monitoring, the O'Neill Pump/Generating Plant unit control and monitoring, and the Upper DMC (Checks 1-12) gate control, position and level detection. These SCADA systems were managed by the SCADA Engineer, with support from the Tracy and/or O'Neill C&I's and electricians. Over the years, more SCADA systems have been introduced: The Lower DMC (Checks 13-21), the DCI Plant, numerous flow metering and level detection sites, and Human-Machine Interfaces (HMI's) for the Jones Units as well as modern electronic relays. The addition of these systems, along with future systems, and the ongoing upgrade to current systems, now requires more resources than the one SCADA Engineer can support. The attached documents contain the current listing of SCADA devices.

The SCADA Engineer is a 25-year employee and plans to retire within the next couple of years. Therefore, an additional staff is necessary not only to support the workload but also for succession planning.

Description of how this request would change current circumstances:

The addition of a SCADA Technician would allow the SCADA Engineer to continue to research and design future systems and upgrades to current systems in a timelier manner as well as provide back-up for SCADA issues during the SCADA Engineer's absences. The additional support of a SCADA Technician would allow prompt attention the day-to-day SCADA issues that arise as well as placing less burden on the support from the Tracy and O'Neill C&I's. Together, the SCADA Engineer and Technician can better manage and support the ever-growing SCADA needs of the Authority and achieve the goals set out in the Strategic Plan.

STAFFING JUSTIFICATION FORM**FY 2021****REQUEST DATE:** 9/30/19**PRIORITY CODE:** - -**EXPENSE CODE:** 5101**BUDGET UNIT:** 20**Type of Purchase**

<input type="checkbox"/>	Materials
<input type="checkbox"/>	Services
<input checked="" type="checkbox"/>	Other: <u>Position Conversions</u>
<input type="checkbox"/>	<u>Request</u>

PROJECT DESCRIPTION:**GENERAL SPECIFICATIONS:**
(See attached information)

Convert Accountant II Position to Supervisor of Operational Accounting and Accounting Tech III to Supervisor of Water Accounting

Finance Department, LBAO

ESTIMATED COST**Salary Cost:** \$89,016.83**Benefits, etc.:** \$26,705.05**Estimated Cost:** **\$115,721.88****CURRENT O&M COST INFORMATION**:
:
:**Description of current circumstances that drive this request:**

Prior to 2017, the Finance Department was managed by the Director of Finance and the Accounting Supervisor. In late 2017, the Accounting Supervisor passed away and this position was filled but the new individual left the Authority after only a few months. Since then all the accounting staff has been reporting directly to the Director of Finance. Therefore, currently eight individuals report directly to the Director of Finance. With all the myriad of issues that arise on a daily basis, this puts a toll on the Director and often delays actions waiting for final review and causes the Director to work very long days and often on weekends. To improve efficiencies and to provide opportunity for advancement, it is proposed that two line positions be converted to supervisor positions by creating a Water Accounting Unit and an Operational Accounting Unit. With this proposed change, the Director of Finance will have three direct reports and allow the Director to better manage her time and direct attention on other areas such as long-term financing needs for future major EO&M projects and participate on CVP financial issues. These key positions will support the Director of Finance in managing the daily activities of the accounting department. SLDMWA's accounting structure and systems are complex, therefore promoting from within will eliminate all need for significant training as well as provide a seamless transition for current staff under this position. The Supervisor of Operational Accounting will be responsible for payroll, accounts receivable, accounts payable, general ledger, and budgets. The Supervisor of Water Accounting will be responsible for O&M water accounting and water payments.

Description of how this request would change current circumstances:

The filling of these positions will enhance the productivity and functionality in the Finance Department. Creating the two supervisor positions will allow the Finance Director to be more in charge of her time and allow her to better ensure that all the necessary accounting and financial work is being done to allow for the Authority to complete annual financial audits timely and to focus on areas of improvements to increase efficiency and to plan for the future. This will strengthen the Finance Department and ensure the accounting function of the Authority continues at a high level well into the future.

San Luis & Delta-Mendota Water Authority

Extra-Ordinary Operations and Maintenance Budget

FY2021/2022

FY 2021 PROJECTS**Project Type: MAINTENANCE**

<u>Project #</u>	<u>Fac</u>	<u>Project Title</u>	<u>Acct Code</u>	<u>Type</u>	<u>Priority</u>	<u>Labor</u>	<u>Materials</u>	<u>Equip.</u>	<u>Contract</u>	<u>Total</u>
E2015002	ONP	Electrical Equipment Periodic Reviews - OPP	F7	M	A-1-b	\$53,100	\$0	\$0	\$132,300	\$185,400
E2020001	JPP	Unit Rewind - Phase 4 (Labor Only) (U1 & U4 partial)		M	B-3-b	\$1,051,800	\$0	\$0	\$0	\$1,051,800
C2015003	DMC	DMC Subsidence Mitigation Project (Design)	I3	M	B-3-c	\$40,100	\$0	\$0	\$500,000	\$540,100
E1995005	ONP	Main Transformer Rehabilitation (Phase 1 - Design)	G3	M	B-3-c	\$33,300	\$0	\$0	\$75,000	\$108,300
C2021001	DMC	Bridge Abutment Repair at MP 92.73	I4	M	B-4-b	\$86,500	\$14,500	\$0	\$82,500	\$183,500
C1997002	DMC	O&M Road Maintenance Program - Phase 10 of 10	E6	M	B-4-b	\$33,700	\$0	\$0	\$136,500	\$170,200
C2021003	DMC	DMC Turnout Flowmeter Upgrade - Phase 1	I6	M	B-4-c	\$0	\$0	\$0	\$260,000	\$260,000
E2021001	ALL	EAM & Finance Software Replacement	I7	M	C-6-c	\$0	\$0	\$0	\$387,300	\$387,300
MAINTENANCE PROJECT TOTALS						\$1,298,500	\$14,500	\$0	\$1,573,600	\$2,886,600

Project Type: RESERVE

<u>Project #</u>	<u>Fac</u>	<u>Project Title</u>	<u>Acct Code</u>	<u>Type</u>	<u>Priority</u>	<u>Labor</u>	<u>Materials</u>	<u>Equip.</u>	<u>Contract</u>	<u>Total</u>
V1999001	ALL	Heavy Equipment Replacement Program (Reserve Fund)	D2	RS	B-5-b	\$0	\$0	\$0	\$573,700	\$573,700
V1999002	ALL	Vehicle Replacement (Reserve Fund)	D1	RS	B-6-c	\$0	\$0	\$0	\$96,600	\$96,600
C2011001	ALL	Facility Infrastructure Replacement/Rehabilitation Program	D3	RS	B-7-c	\$0	\$0	\$0	\$170,000	\$170,000
E2000004	ALL	Replace Computer/Network Communication Equip (Reserve Fund)	D0	RS	C-6-b	\$0	\$113,000	\$0	\$0	\$113,000
RESERVE PROJECT TOTALS						\$0	\$113,000	\$0	\$840,300	\$953,300

Project Type: SPECIAL FUNDED PROJECT

<u>Project #</u>	<u>Fac</u>	<u>Project Title</u>	<u>Acct Code</u>	<u>Type</u>	<u>Priority</u>	<u>Labor</u>	<u>Materials</u>	<u>Equip.</u>	<u>Contract</u>	<u>Total</u>
E1999001	JPP	Unit Rewind - Phase 4 (U1 & U4 partial)	F4	RX	B-3-a	\$0	\$0	\$0	\$6,238,400	\$6,238,400
SPECIAL FUNDED PROJECT PROJECT TOTALS						\$0	\$0	\$0	\$6,238,400	\$6,238,400
FY 2021 SUBTOTAL						\$1,298,500	\$127,500	\$0	\$8,652,300	\$10,078,300

FY 2022 PROJECTS**Project Type: MAINTENANCE**

<u>Project #</u>	<u>Fac</u>	<u>Project Title</u>	<u>Acct Code</u>	<u>Type</u>	<u>Priority</u>	<u>Labor</u>	<u>Materials</u>	<u>Equip.</u>	<u>Contract</u>	<u>Total</u>
E2015001	TFO	TFO/LBFO/DCI Arc Flash Study	E1	M	A-1-b	\$31,400	\$0	\$0	\$172,400	\$203,800
E2020001	JPP	Unit Rewind - Phase 5 (Labor Only) (U4 & U3 partial)		M	B-3-b	\$780,700	\$0	\$0	\$0	\$780,700
M2012004	ONP	Rehabilitate Penstock Interior Coating	E4	M	B-3-b	\$208,100	\$53,500	\$0	\$662,000	\$923,600
M2015006	ONP	Rehabilitate Pump Assemblies - Phase 5	E2	M	B-3-b	\$1,405,500	\$51,700	\$0	\$238,800	\$1,696,000
E2016001	ONP	WECC Testing by USBR Denver Office	E3	M	B-3-b	\$19,300	\$0	\$0	\$72,900	\$92,200
M2016001	JPP	Purchase Wear Rings for Pumps	J1	M	B-3-c	\$26,800	\$3,500	\$0	\$375,000	\$405,300
E1995005	ONP	Main Transformer Rehabilitation - Phase 2	G3	M	B-3-c	\$373,400	\$20,000	\$0	\$1,040,000	\$1,433,400
C1997002	DMC	O&M Road Maintenance Program - Phase 1 of 10	E6	M	B-4-b	\$35,000	\$0	\$0	\$178,000	\$213,000
C2021003	DMC	DMC Turnout Flowmeter Upgrade - Phase 2	I6	M	B-4-c	\$0	\$0	\$0	\$255,000	\$255,000
MAINTENANCE PROJECT TOTALS						\$2,880,200	\$128,700	\$0	\$2,994,100	\$6,003,000

Project Type: RESERVE

<u>Project #</u>	<u>Fac</u>	<u>Project Title</u>	<u>Acct Code</u>	<u>Type</u>	<u>Priority</u>	<u>Labor</u>	<u>Materials</u>	<u>Equip.</u>	<u>Contract</u>	<u>Total</u>
V1999001	ALL	Heavy Equipment Replacement Program (Reserve Fund)	D2	RS	B-5-b	\$0	\$0	\$0	\$507,600	\$507,600
V1999002	ALL	Vehicle Replacement (Reserve Fund)	D1	RS	B-6-c	\$0	\$0	\$0	\$181,500	\$181,500
C2011001	ALL	Facility Infrastructure Replacement/Rehabilitation Program	D3	RS	B-7-c	\$0	\$0	\$0	\$208,000	\$208,000
E2000004	ALL	Replace Computer/Network Communication Equip (Reserve Fund)	D0	RS	C-6-b	\$0	\$68,250	\$0	\$0	\$68,250
RESERVE PROJECT TOTALS						\$0	\$68,250	\$0	\$897,100	\$965,350

Project Type: SPECIAL FUNDED PROJECT

<u>Project #</u>	<u>Fac</u>	<u>Project Title</u>	<u>Acct Code</u>	<u>Type</u>	<u>Priority</u>	<u>Labor</u>	<u>Materials</u>	<u>Equip.</u>	<u>Contract</u>	<u>Total</u>
E1999001	JPP	Unit Rewind - Phase 5 (U4 & U3 partial)	F4	RX	B-3-a	\$0	\$0	\$0	\$7,089,600	\$7,089,600
SPECIAL FUNDED PROJECT PROJECT TOTALS						\$0	\$0	\$0	\$7,089,600	\$7,089,600

FY 2022 SUBTOTAL	\$2,880,200	\$196,950	\$0	\$10,980,800	\$14,057,950
-------------------------	--------------------	------------------	------------	---------------------	---------------------

SL&DMWA 10 Year Plan (EO&M and USBR/RAX Projects)

WORKING DRAFT

EO&M #	Project Title	Code	Facility	Priority	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
EXTRAORDINARY MAINTENANCE PROJECTS					Estimated Project Cost (x \$1,000)									
E2015002	Electrical Equipment Periodic Reviews - OPP	F7	ONP	A-1 - b	185.4					215.0				
E2020001	Unit Rewind (Rotor & Stator) (Units 1 - 5 Labor Only) (F4)		JPP	B-3 - b	1,051.8	780.7	785.4	369.1						
C2015003	DMC Subsidence Mitigation Project	I3	DMC	B-3 - c	540.1			25,000.0	25,000.0	25,000.0	25,000.0	25,000.0		
E1995005	Main Transformer Rehabilitation/Replacement	G3	ONP	B-3 - c	108.3	1,433.4								
C1997002	O&M Road Maintenance Program	E6	DMC	B-4 - b	170.2	213.0	217.0	221.6	226.0	230.6	235.2	239.9	244.7	249.6
C2021001	Bridge Abutment Repair at MP 92.73	I4	DMC	B-4 - b	183.5									
C2021003	DMC Flowmeter Upgrade Program	I6	DMC	B-4 - c	260.0	255.0	255.0							
E2021001	EAM & Finance Software Replacement	I7	ALL	C-6 - c	387.3									
E2015001	TFO/LBFO/DCI Arc Flash Study	E1	TFO	A-1 - b		203.8					225.0			
E2016001	WECC Testing by USBR Denver Office	E3	ONP	B-3 - b		92.2					102.0			
M2012004	Rehabilitate Penstocks Interior Coating	E4	ONP	B-3 - b		923.6		979.0		1,037.8				
M2015006	Rehabilitate Pump Assemblies Program	E2	ONP	B-3 - b		1,696.0		1,797.8		1,905.6		2,020.0		
M2016001	Purchase Wear Rings for Pumps	J1	JPP	B-3 - c		405.3								
E2015003	Arc Flash Study - JPP	F8	JPP	A-1 - b			105.0					116.0		
E2009003	SCADA, Controls and Protection System Modernization	G1	ONP	B-2 - b			227.0	234.0						
C2015001	Concrete Lining Repair	F0	DMC	B-3 - b			325.0	332.0						
M2015003	Rehabilitate Coating on Pump Casings & Bifurcation		JPP	B-3 - c			100.0	102.0	104.0					
C2019004	TFO O&M Complex Pavement Rehabilitation		JPP	B-4 - b			250.0							
E2019030	Plant Security System Improvements		ONP	C-5 - d			81.0							
M1994022	ONP Cooling Water System Rehabilitation		ONP	B-2 - b				250.0						
C2020001	Canal Modifications due to Subsidence (Labor Only)		DMC	B-3 - c				25.0		100.0	102.0	104.0	106.0	
E2020002	Excitation System & Control Modernization (Labor Only)		JPP	B-3 - c				175.0	100.0	100.0	100.0	100.0	100.0	
C2017003	Turnout Trashrack Fabrication Contract		DMC	B-4 - c				200.0						
E2014006	SCADA System Modernization	I2	JPP	C-4 - c				187.2	192.8					
M2019010	Design & Install Pump Bowl Access Openings on All Units		ONP	A-1 - b				211.5	217.8	224.1				
E2019028	Station Service Backup Battery System Replacement		ONP	B-2 - c					110.0					
C1996012	Intake Channel Embankment Stabilization		DMC	B-3 - b					300.0					
C2015004	DMC 5 Yr Subsidence Survey	H1	DMC	B-3 - c					83.0					91.0
E2019003	Check Electrical Equipment Rehabilitation		DMC	B-4 - c					84.0					
M2019028	Plant Flowmetering System Rehabilitation		JPP	B-4 - c					250.0					
M2019037	Plant Water Storage Tank Rehabilitation		ONP	B-4 - c					150.0					
M2019045	Stub Shaft Crane Rehabilitation		JPP	B-4 - c					60.0					
M2019001	O'Neill PP Bridge Crane Rehabilitation		ONP	B-5 - c					113.0					
M2019044	Machine Shop Crane Rehabilitation		JPP	B-5 - c					75.0					
M2019049	Trashrack Replacement (SLDMWA FAB & CONTRACT BLST&P		ONP	B-5 - c					50.0	51.0				
E2020003	Station Service & Dist. Equip. Replacement (Labor Only)		JPP	A-3 - c						200.0		100.0	100.0	
M2019022	HVAC System Rehabilitation/Replacement		JPP	B-4 - b						400.0				
E2019012	UPS Battery Charging System Replacement		ONP	B-4 - c						100.0				
C2009003	Wasteway Capacity Restoration		DMC	C-5 - c						75.0		250.0	255.0	
E2019024	Station Service Backup Battery System Replacement		JPP	B-2 - c							115.0			
E2009004	UPS Battery Replacement		JPP	B-4 - b							88.0			
E2019002	SCADA & Communication System Improvements		DCI	B-4 - c							88.0			
M2019005	HVAC System Rehabilitation/Replacement		DCI	B-4 - c							75.0			

SL&DMWA 10 Year Plan (EO&M and USBR RAX Projects)

DRAFT

EO&M #	Project Title	Code	Facility	Priority	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
M2019016	Siphon Breaker Valve Control System Rehabilitation		JPP	B-4 - c							100.0			
C2019005	Penstock/Manifold Interior Coating Rehabilitation		DCI	B-5 - b							150.0			
E2019004	Penstock Cathodic Protection System Replacement		DCI	B-5 - b							88.0			
M2019014	Stoplog Rehabilitation		JPP	B-5 - b							250.0			
M2019009	Flowmetering Improvements		DCI	B-5 - c							100.0			
M2019026	Stoplog Rehabilitation (Lakeside)		ONP	B-5 - c							75.0			
M2017001	OPP Shaft Sleeve Manufacturing	F3	ONP	B-4 - c								102.0		
C2020002	Replace Althea Ave Bridge (Labor Only)		DMC	B-5 - c								25.0	75.0	
E2019025	Plant Security System Upgrades		JPP	B-5 - c								75.0		
M2019032	Trashrack Cleaner & Stoplog Crane Rehabilitation		ONP	B-5 - c								200.0		
C2016001	DMC Road Rehabilitation	G2	DMC	B-4 - b									391.0	
M2019025	100 Ton Gantry Crane Rehabilitation		JPP	B-4 - c									300.0	
M2019043	HVAC System Rehabilitation/Replacement		ONP	B-4 - c									100.0	
E2019010	Plant Flowmeter System Rehabilitation		ONP	B-5 - c									244.0	
M2019033	Plant Roof Surface Replacement		ONP	B-7 - c									100.0	
E2020004	Unit Rewind (Labor Only)		ONP	B-3 - b										350.0
C2019001	Radial Gate Rehabilitation Program		DMC	B-3 - c										400.0
M2019038	Water System Sand Filter System Rehabilitation/Replacement		ONP	B-4 - b										250.0
M2019002	JPP Sandfilter System Replacement		JPP	B-4 - c										100.0
M2019015	Trashrack Cleaner Rehabilitation		JPP	B-4 - c										300.0
E2019019	Plant Security System Improvements		DCI	B-5 - b										50.0
C2020003	Replace Russell Ave Bridge (Labor Only)		DMC	B-5 - c										25.0
M2019048	Plant Hydraulic System Rehabilitation/Replacement		JPP	B-5 - c										125.0
FY TOTALS (x \$1,000):					\$2,886.6	\$6,003.0	\$2,345.4	\$30,084.2	\$27,115.6	\$29,639.1	\$26,893.2	\$28,331.9	\$2,015.7	\$1,940.6
RESERVE PROJECTS					Estimated Project Cost (x \$1,000)									
V1999001	Heavy Equipment Replacement Program (Reserve Fund)	D2	ALL	B-5 - b	573.7	507.6	463.3	335.2	69.6		196.8	325.6	176.1	
V1999002	Vehicle Replacement Program (Reserve Fund)	D1	ALL	B-6 - c	96.6	181.5	185.3	198.1	191.9	87.2	207.9	179.3	550.7	219.1
C2011001	Facility Infrastructure Replacement/Rehabilitation Program	D3	ALL	B-7 - c	170.0	208.0	50.0	145.0	89.0	96.0	32.0	110.0	118.0	34.0
E2000004	Replace Computer/Network Comm Equip (Reserve Fund)	D0	ALL	C-6 - b	113.0	68.3	144.2	75.2	112.4	92.6	78.4	155.1	54.8	76.6
FY TOTALS (x \$1,000):					\$953.3	\$965.4	\$842.8	\$753.5	\$462.9	\$275.8	\$515.1	\$770.0	\$899.6	\$329.7
PROJECTS SEEKING OUTSIDE FUNDING					Estimated Project Cost (x \$1,000)									
E1999001	Unit Rewinds (Rotor & Stator) All Units	F4	JPP	B-3 - a	6,238.4	7,089.6	7,215.8	1,627.8						
E2009005	JPP Excitation Cabinet & Control Panel Refurbishment	F9	JPP	B-3 - c				1,245.2	914.3	933.0	951.0	970.0	990.0	
E2019005	Station Service SWBD & Breaker Replacement		JPP	B-2 - b						250.0		2,500.0	2,575.0	
C2015006	Replace DMC Althea Ave Bridge		DMC	B-4 - c								1,500.0	1,545.0	
E2004002	Unit Rotor & Stator Rewind (All Units)	F5	ONP	B-3 - c										2,250.0
C2015005	Replace DMC Russell Ave Bridge		DMC	B-4 - c										1,500.0
FY TOTALS (x \$1,000):					\$6,238.4	\$7,089.6	\$7,215.8	\$2,873.0	\$914.3	\$1,183.0	\$951.0	\$4,970.0	\$5,110.0	\$3,750.0
\$21,500.9 TOTALS:					\$10,078.3	\$14,058.0	\$10,404.0	\$33,710.7	\$28,492.8	\$31,097.9	\$28,359.3	\$34,071.9	\$8,025.3	\$6,020.3
10 Year Plan Grand Total (x\$1,000): \$204,318.3														

FY2021

Extraordinary O&M Projects Information

***San Luis & Delta-Mendota Water Authority
Extraordinary O&M Projects
Project Description and Justification Sheet***

\$185,400

Project Description and Scope:

Arc Flash Hazard Analysis scope of work includes on-site evaluation, modeling, analysis drawing, fault current studies and coordination studies. An Arc Flash Hazard Report and Labels will be provided after completion. Reclamation's Technical Services Center engineers will also perform the Facilities Equipment Rating review & Protective Relay Settings review since site surveys required are similar and the projects are required with the same 5-year frequency.

Facilities Equipment Rating review analyzes the equipment design ratings for the main power train equipment for continuous current (normal operation) and short circuit current duties (emergency). The scope of work will include data collection and compilation, perform fault, power flow and dynamic studies, equipment rating studies and the final report.

Protective Relay Settings review is an analysis and documentation of the adequacy and settings of medium and high voltage protective relay systems. The report will include a review of adequacy of existing relays, review of relay settings, recommended relay settings as required, recommended improvements, and documentation of reasoning and calculations used for the relay configurations.

Project Purpose and Background:

The Arc Flash Hazard Analysis is a study that investigates an employee's potential exposure to an arc flash for the purposes of injury prevention, safe work practices, and appropriate levels of personal protective equipment. In accordance to Reclamation's Facilities Instructions, Standards, and Techniques (FIST) the Arc Flash Hazard analysis, Facilities Equipment Rating review and Protective Relay Settings review are required to be performed every 5 years. The last Arc Flash Hazard analysis was performed in 2015, while the other reviews have yet to be performed.

The Facilities Equipment Rating Review ensures that Facility Ratings used in the reliable planning and operation of the Bulk Electric System (BES) are determined based on technically sound principles. A Facility Rating is essential for the determination of System Operating Limits. This report satisfies the facility ratings documentation requirements of the North American Electric Reliability Corporation (NERC) Standard FAC-008-3 Facility Ratings, outlined in Reclamation's FIST Volume 4-1B.

The Protective Relay Settings review includes NERC and Western Electricity Coordinating Council (WECC) standards that pertain to Protection Systems. The list includes system protection coordination, mis-operation identification and correction, coordination of plant capabilities, voltage regulating controls, transmission relay loadability, generator frequency and voltage protective relay settings, and generator relay loadability.

Project Status:

FY2021 Project - Awaiting approval/funding

***San Luis & Delta-Mendota Water Authority
Extraordinary O&M Projects
Project Description and Justification Sheet***

Project No.: E2020001 **Project Code:** -2021 **Priority:** B-3-b

Facility: JPP

Project Lead: MENG

Project Title: Unit Rewind - Phase 4 (Labor Only) (U1 & U4 partial)

IN-HOUSE COSTS: **Labor:** \$1,051,800.00 **Materials:** \$0.00 **Equipment:** \$0.00

CONTRACT COSTS: \$0.00 **Estimated Total Cost:**

\$1,051,800

Project Description and Scope:

The SLDMWA labor required to support this project is associated with the following activities: project management, unit disassembly, shaft centerline verification, 100T gantry crane support for contractor, unit assembly, shaft alignment and performance testing.

Since SLDMWA will be financing the project through loans, to reduce the overall loan amount, the SLDMWA labor cost is separated from all other costs and is proposed to be self-funded. Self-funding the labor component of the Unit Rewind work will provide the cost share requirement for WIFIA funding.

NOTE: The rewind work for each unit will be completed in 9 months. As a result, the total labor cost for the fiscal year includes the entire cost for one unit and only a portion of the following unit.

Project Purpose and Background:

The six (6) motor stators at the Jones Pumping Plant (JPP) were refurbished between 1977 and 1984. The typical service life of a unit stator winding is 25 years. In 2015, the age of the unit stator windings was between 31 and 38 years old. Phase 1 of this multi-phased project was funded and completed in FY15. During this phase, the USBR performed a condition assessment on all six (6) JPP units and the findings were that all the units were at the end of their service life. A rewind order was developed based on the test information during this phase as well. The rewind priority order is Unit 6, 2, 1, 4, 3 & 5. Phase 2 was funded in FY18 and completed in FY19 and it included the design and rewind of JPP Unit 6. Phase 3 was funded in FY20 and included the development of the contract documents for the rewind of the remaining 5 JPP units and the rewind of JPP Unit 2.

NOTE: The impact of this project if not accomplished is that the Jones Pumping Plant (JPP) unit reliability is decreased and has the high potential to cause unit failures.

Project Status:

FY2015 - Phase 1 - Condition Assessment - Funded by SLDWMA and completed

FY2018 - Phase 2 - Design & Rewind of JPP Unit 6 - Financed by USBR and completed

FY2020 - Phase 3 - Develop Contract Documents for remaining 5 Units & Rewind Unit 2 - Funded by SLDMWA and contract awarded for remaining units - contract work in progress

FY2021 Project - Awaiting approval/funding - Unit 1 & 4 partial (Seeking USBR Financing for Unit 1)

FY2022 Project - Awaiting approval/funding - Unit 4 & 3 partial

FY2023 Project - Awaiting approval/funding - Unit 3 & 5 partial (Seeking USBR Financing for Unit 5)

FY2024 Project - Awaiting approval/funding - Unit 5

***San Luis & Delta-Mendota Water Authority
Extraordinary O&M Projects
Project Description and Justification Sheet***

Project No.: C2015003 ***Project Code:*** I3-2021 ***Priority:*** B-3-c

Facility: DMC

Project Lead: CIVIL

Project Title: DMC Subsidence Mitigation Project (Design)

IN-HOUSE COSTS: ***Labor:*** \$40,100.00 ***Materials:*** \$0.00 ***Equipment:*** \$0.00

CONTRACT COSTS: \$500,000.00 ***Estimated Total Cost:***

\$540,100

Project Description and Scope:

Based on the findings of the assessment performed in 2019, the SLDMWA may need to provide funding for the planning, design and environmental approval process for the DMC Subsidence Correction/Mitigation project. This is placeholder funding in the event Reclamation is unable to secure funds for the project. The SLDMWA funds will support the initial design, Value Engineering Study, contract document preparation and the NEPA/CEQA environmental compliance efforts by USBR, consultants and the SLDMWA staff. In addition, seek funding options for the full scope of the project.

Project Purpose and Background:

The Delta-Mendota Canal (DMC) has experienced subsidence along its entire 116.5 mile length over the years since original construction. The USBR raised the lining and structures for the majority of the lower DMC in the 1970's to compensate for the subsidence that occurred on the lower DMC. The upper DMC began showing signs of subsidence in the 1990's when buckled concrete lining panels began appearing and a reduction in canal lining freeboard began limiting the conveyance capacity in several areas. The Authority completed temporary site specific lining extensions on the top of the lining in the upper reaches of the DMC. Recent subsidence surveys performed by Reclamation in 2014, 2016 and 2018 along the DMC show two distinct areas where subsidence is occurring; between MP 20 to 64 and MP 85 to 116.5. The purpose of the project is to restore the capacity of the DMC that has been lost due to the ongoing subsidence.

Project Status:

FY2021 Project - Awaiting approval/funding

San Luis & Delta-Mendota Water Authority
Extraordinary O&M Projects
Project Description and Justification Sheet

Project No.: E1995005

Project Code: G3-2021

Priority: B-3-c

Facility: ONP

Project Lead: EENG

Project Title: Main Transformer Rehabilitation (Phase 1 - Design)

IN-HOUSE COSTS: Labor: \$33,300.00

Materials: \$0.00

Equipment: \$0.00

CONTRACT COSTS: \$75,000.00

Estimated Total Cost:

\$108,300

Project Description and Scope:

The project consists of designing and preparing the technical specifications for the rehabilitation (refurbishment) requirements for the 4 single-phase transformers. The design services will be performed either by Reclamation or an electrical engineering consultant that specializes in transformer refurbishment. Phase 2 of this project is to refurbish the four transformers in FY2022.

Project Purpose and Background:

The O'Neill PG Plant is fed via PG&E 70 kV line, through a WAPA circuit breaker into (3) single-phase Transformers. There are 4 transformers, 3 phases and 1 spare, each one is 10 MVA, 72.5/4.16 kV and are the original transformers that were commissioned with the Plant in 1968. The spare transformer has never been placed into service. These transformers are critical to the operation of the plant and based on the condition assessment performed in 2019 by Reclamation, degradation of the insulation is beginning to occur and the transformers needs to be refurbished as soon as possible before the degradation is irreversible. Mid-Life refurbishment of transformers is conducted to replace worn subcomponents of specific power system equipment to extend the life of the unit and to increase its efficiency and reliability. Transformer failure can usually be attributed to a failure of a component such as tap changer, bushings, windings, core, tank and dielectric fluid. NOTE: In 2003, the oil in the transformers were serviced by cleaning and testing. Annual oil tests have been performed on the transformers by RESA Power Solutions, LLC. In 2018, the test results indicated that the oil in all three transformers should be treated and RESA recommended a hot oil reclamation or retro-fill.

The USBR Denver office performed an assessment of the four (4) transformers in 2019 and recommended the hot oil reclamation as well. In addition, the immediate replacement of the transformer bushings was recommended and completed in September, 2019 to allow time to plan for transformer replacement or refurbishment. After consultation with Reclamation experts, refurbishment rather than replacement of all the transformers were deemed the most appropriate option at this time. It was estimated the refurbishment will extend the life another 50 years.

Project Status:

FY2021Project - Awaiting approval/funding.

***San Luis & Delta-Mendota Water Authority
Extraordinary O&M Projects
Project Description and Justification Sheet***

Project No.: C2021001 ***Project Code:*** I4-2021 ***Priority:*** B-4-b

Facility: DMC

Project Lead: CIVIL

Project Title: Bridge Abutment Repair at MP 92.73

IN-HOUSE COSTS: ***Labor:*** \$86,500.00 ***Materials:*** \$14,500.00 ***Equipment:*** \$0.00

CONTRACT COSTS: \$82,500.00

Estimated Total Cost:

\$183,500

Project Description and Scope:

The project is to repair the abutment and liner at the bridge located at MP92.73-R. The failed liner will be removed by divers, and pea gravel will be placed in the void, then fabriform installed over the pea gravel. Fabriform is a temporary liner repair that consists of a concrete filled fabric, held in-place with steel clamp bars. The bridge timber piles will be accessed for damage, and any rotted areas repaired. Thin stainless steel plates may be placed around the piles if strength has been lost. This work will need to occur during a low demand period.

Project Purpose and Background:

The liner has failed under the bridge leading to severe material loss and undercutting of the bridge abutment. RO&M Recommendation number 2009-2-G is to "Evaluate the extent of damage to the liner and bridge structure underneath the farm bridge at MP 92.73 on the right bank and make necessary repairs." The timber piles are fully exposed at the top. An underwater assessment/survey will be performed to assess the damage and to acquire detailed measurements of the repair area. The timber piles will be protected against the elements to prevent further deterioration, and then protected in-place with a gravel envelope, and liner replacement. There is a large conduit that crosses under the bridge, aligned with the O&M road. This conduit will need to be relocated either on a temporary or permanent basis, and will take research and coordination. These repairs are necessary to protect the structural integrity of the canal and bridge, and are a requirement per the RO&M inspection recommendation.

Project Status:

FY2021 Project - Awaiting approval/funding

***San Luis & Delta-Mendota Water Authority
Extraordinary O&M Projects
Project Description and Justification Sheet***

Project No.: C1997002 ***Project Code:*** E6-2021 ***Priority:*** B-4-b

Facility: DMC

Project Lead: CIVIL

Project Title: O&M Road Maintenance Program - Phase 10 of 10

IN-HOUSE COSTS: ***Labor:*** \$33,700.00 ***Materials:*** \$0.00 ***Equipment:*** \$0.00

CONTRACT COSTS: \$136,500.00 ***Estimated Total Cost:***

\$170,200

Project Description and Scope:

This phase will install 8.85 miles of a chipseal coat to the 12' wide O&M Road between MP 81.69 and 90.54.

Project Purpose and Background:

The entire length of the O&M road of the Delta-Mendota Canal is traveled daily by operations and maintenance personnel and, in some areas the general public. To extend the life of the O&M road and reduce overall maintenance and/or repair costs, the O&M Technical Committee approved the O&M Road Maintenance Program in 1998. The objective of the O&M Road Maintenance Program is to apply a wearing surface (or chipseal) on approximately one-tenth of the DMC roadway annually. The actual lengths and locations will be determined annually based on roadway use and condition.

Project Status:

All previous phases for Round 2 have been funded and completed.
FY2021Project - Awaiting approval/funding

Project No.: C2021003	Project Code: I6-2021	Priority: B-4-c
Facility: DMC	Project Lead: <u>CIVIL</u>	
Project Title: DMC Turnout Flowmeter Upgrade - Phase 1		
IN-HOUSE COSTS:	Labor: \$0.00	Materials: \$0.00
EQUIPMENT COSTS:	Equipment: \$0.00	
CONTRACT COSTS: \$260,000.00	Estimated Total Cost:	\$260,000

The DMC Turnout Flow Meter Upgrade will be the complete replacement of the mechanical open flow meters used along the DMC with electronic flow meters (smart meters) that electronically transmit flow and use data from the field to a storage device located at the Tracy Field Office.

This project would also include the development of the onsite collection server which will include the purchase and installation of the hardware, proprietary software, and create the data path for the collected totalized use information.

This project would replace the 200 flow meters along the DMC in three (3) phases (approximately 66 meters over a three-year period). The first phase is to purchase the meters to convert all the meters except for the DPWD's meters, this will reduce the time needed in reading meters for all the District turnouts except DPWD's and prepare reports for those districts. DPWD's meter replacements will occur over the final two phases, 66 meters per phase, and complete the flow meter upgrade project.

This project purpose is to accomplish the strategic plan goals, specifically 4.5.2-Develop a plan to convert flow meters for digital readouts on the DMC, to reduce labor associated with the manual reading of flow meters and use report production, as well as, replace aging flow meters that require more periodic maintenance and have harder to find parts.

41 of 62

San Luis & Delta-Mendota Water Authority
Extraordinary O&M Projects
Project Description and Justification Sheet

needed for the water accounting process.

By design, the proposed meters for the project have fewer moving parts which will provide for improved meter accuracy and reduce meter maintenance requirements. The labor savings will allow existing staff to focus on other necessary DMC operation and maintenance tasks.

Project Status:

FY2021 Project - Awaiting Approval/Funding

***San Luis & Delta-Mendota Water Authority
Extraordinary O&M Projects
Project Description and Justification Sheet***

<i>Estimated Total Cost:</i>	\$387,300
-------------------------------------	------------------

The SLDMWA shall procure replacement software program for the existing Oracle Work and Asset Management (WAM) and Dynamics Great Plains (GP) software applications. WAM was implemented in 2003 and GP in 2004.

San Luis & Delta-Mendota Water Authority
Extraordinary O&M Projects
Project Description and Justification Sheet

accurately push it to GP or reconcile to GP. The GP server resides in Los Banos.

Both WAM and GP have served the SLDMWA well, but they are older generation software. With the upcoming end of life for Oracle WAM, staff recommends purchasing replacement software that is comprehensive that includes work and asset management as well as financial and administrative functionalities. Oracle WAM and GP will have served the Authority for 18 years by the time it is replaced. The investment/service life for the new program is therefore expected to be 15-20 years if not longer.

Project Status:

FY2021 Project - Awaiting Approval/Funding

***San Luis & Delta-Mendota Water Authority
Extraordinary O&M Projects
Project Description and Justification Sheet***

Project No.: V1999001

Project Code: D2-2021

Priority: B-5-b

Facility: ALL

Project Lead: SENG

Project Title: Heavy Equipment Replacement Program (Reserve Fund)

IN-HOUSE COSTS: Labor: \$0.00

Materials: \$0.00

Equipment: \$0.00

CONTRACT COSTS: \$573,700.00

Estimated Total Cost:

\$573,700

Project Description and Scope:

The San Luis & Delta-Mendota Water Authority equipment will be replaced or considered for replacement when the equipment is no longer economical to operate and/or maintain. The purpose of this Reserve Project is to set-aside funding annually for replacement of the Authority critical heavy equipment. The Equipment Replacement Plan will be presented for approval each year.

Project Purpose and Background:

The San Luis & Delta-Mendota Water Authority Equipment Replacement Plan objective is to provide safe and efficient equipment in a manner which maximizes the equipment utilization for the Authority.

Project Status:

See attached Heavy Equipment Replacement 10 Year Plan.

Equip #	Equipment	Category	RESP OFC	YEAR	ARB Regulated	Authority Service Life	Forecasted Replacement Year	EQUIPMENT REPLACEMENT COST(FY19\$)	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
8045	Genie Man Lift (Electric)	1	TFO	1998		20	2021	\$55,000	\$ 60,000									
664	Forklift (4K lb Capacity) JPP (LPG)	1	TFO	1989	√	30	2021	\$35,000	\$ 35,000									
2613	Grader (John Deere)	1	TFO	1993	√	20	2021	\$283,000	\$ 283,000									
2659	Case MX 150 Tractor	1	TFO	1999	√	20	2021	\$156,000	\$ 156,000									
New	Mower	1	LBFO			20	2041	\$23,000	\$ 23,000									
2630	Dump Truck	1	LBFO	2000	√	20	2022	\$178,500		\$ 178,500								
P-799	10" Pump	1	LBFO	1966	√	40	2022	\$60,000		\$ 60,000								
2633	Spray Truck (2.5 Ton)	1	LBFO	2000	√	20	2022	\$140,000		\$ 140,000								
2607	Dump Truck-OPP Trash Racks	1	OPP	1981		40	2022	\$100,000		\$ 100,000								
666	Forklift (4K lb Capacity) Pigeon Roost (LPG)	1	ONP	1989	√	30	2022	\$29,000			\$ 29,000							
662	Forklift (5K lb Capacity) ONP SHOP (DSL)	1	ONP	1988	√	30	2023	\$35,000			\$ 35,000							
8001	20-Ton P&H Omega RT Crane	1	LBFO	1988	√	30	2023	\$300,000			\$ 300,000							
8057	JLG Man Lift	1	TFO	2008		20	2023	\$60,000			\$ 60,000							
2648	Front End Loader	1	LBFO	1993	√	30	2024	\$152,800				\$ 152,800						
8058	Truck/Tractor	1	LBFO	2008	√	15	2024	\$145,000				\$ 145,000						
2627	Bottom Belly Dump Trailer	1	LBFO	1996		30	2025	\$60,000					\$ 60,000					
8050	Lowboy Trailer	1	LBFO	2007		20	2027	\$115,000							\$ 115,000			
8052	Flatbed Tilt Trailer	1	TFO	2007		20	2027	\$45,000							\$ 45,000			
8068	Boom Truck (26 Ton Capacity)	1	TFO	2009	√	20	2028	\$257,000								\$ 257,000		
8082	Dump Truck	1	TFO	2011	√	20	2031	\$178,500										
8078	Flatbed Tilt Trailer	1	LBFO	2011		20	2031	\$45,000										
8083	Truck/Tractor	1	ALL	2012	√	20	2032	\$145,000										
8094	Boom Truck	1	LBFO	2012	√	20	2032	\$257,000										
8090	Compact Tracked Loader	1	TFO	2013	√	20	2033	\$70,000										
8099	Water Truck	1	TFO	2013	√	20	2033	\$152,000										
8100	Dump Truck	1	LBFO	2013	√	20	2033	\$178,500										
8112	Backhoe	1	LBFO	2016	√	20	2036	\$128,700										
8113	Backhoe	1	TFO	2016	√	20	2036	\$128,700										
8126	Water Truck	1	LBFO	2017	√	20	2037	\$152,000										
8125	Excavator	1	TFO	2017	√	20	2037	\$320,000										
8065	Forklift (2.5 Ton Capacity) (LPG)	1	TFO	2009	√	30	2039	\$28,500										
8136	Case Magnum 180 Tractor	1	LBFO	2018	√	20	2039	\$156,000										
8072	12' Heavy Duty Disc	1	TFO	2011		30	2041	\$23,000										
8079	Forklift (4000 Lb Capacity) LBFO SHOP (LPG)	1	LBFO	2011	√	30	2041	\$31,500										
8095	Forklift (4K lb Capacity) WH (Electric)	1	TFO	2013	√	30	2043	\$33,000										
8096	Forklift (7.5 Ton Capacity) TFO YARD (LPG)	1	TFO	2013	√	30	2043	\$89,500										
8097	Forklift (10K lb Capacity) LBFO YARD (LPG)	1	LBFO	2013	√	30	2043	\$62,500										
8109	12' Heavy Duty Disc	1	LBFO	2016		30	2046	\$23,000										
8132	Forklift (4K lb Capacity) JPP (Electric)	1	TFO	2018	√	30	2048	\$38,000										
8133	Forklift (4K lb Capacity) SB&Pnt (LPG)	1	TFO	2018	√	30	2048	\$29,500										
8135	Spray Truck (1 Ton)	1	LBFO	2018		10	2029	\$135,000									\$ 135,000	
8134	1.5 Ton Service Truck with 2 Ton Hoist	1	JPP	2000		15	2019	\$70,000										
8138	Lowboy Trailer	1	TFO	2018		20	2039	\$115,000										
2642	Dozer (w/rippers)	1	LBFO	1976	√	40	2020	\$300,000										
697	200 kW Emergency Generator - Trailer Mounted	1	TFO	1999	√	40	2020	\$130,000										
NEW	Long Reach Excavator	1	LBFO	2019	√	20	2020	\$350,000										
8145	Grader (John Deere)	1	LBFO	2019	√	25	2020	\$345,000										
8148	Bobcat	1	LBFO	2019	√	20	2040	\$75,000										
								Total	\$ 557,000	\$ 478,500	\$ 424,000	\$ 297,800	\$ 60,000	\$ -	\$ 160,000	\$ 257,000	\$ 135,000	\$ -
√	- Emissions regulated by California Air Resources Board (Off Road has bold font)						# of Equipment Replaced	5	4	4	2	1	0	2	1	0	0	
	- Currently CARB Compliant						3% Inflation Factor per Year	\$ 16,710	\$ 29,141	\$ 39,316	\$ 37,377	\$ 9,556	\$ -	\$ 36,780	\$ 68,560	\$ 41,144	\$ -	
							Yearly Total	\$ 573,700	\$ 507,600	\$ 463,300	\$ 335,200	\$ 69,600	\$ -	\$ 196,800	\$ 325,600	\$ 176,100	\$ -	

NOTE: Equipment cost rounded to the nearest \$100.

Grand Total \$ 2,647,900

**SAN LUIS & DELTA-MENDOTA WATER AUTHORITY
EQUIPMENT REPLACEMENT JUSTIFICATION FORM
FY2021**

REPLACE AERIAL LIFT

ESTIMATE COST: \$60,000

EXISTING EQUIPMENT INFORMATION

VEHICLE NO: 8045	YEAR: 1998	AGE (YRS.): 22
MAKE: Genie	MODEL: Z30/20N	
DEPARTMENT: JPP	MAINTENANCE YARD: TFO	
CURRENT HOURS: 1333	PROJECTED HOURS WHEN REPLACED:	1400
MECHANICS RATING OF VEHICLE:	POOR: X	FAIR: GOOD:

DESCRIPTION AND JUSTIFICATION

DESCRIPTION OF EQUIPMENT USE WITHIN THE AUTHORITY:

This 30-foot electric aerial lift is used for a great variety of repairs around the plants and along the DMC. This is an extremely compact lift which allows it to be used inside the pumping plant for.

- Replacement of lights
- New equipment installation
- PM's and repairs to existing equipment such as cranes and trash rack cleaners

This piece of equipment is used approximately 20 times per year.

REASON (S) FOR REPLACEMENT:

This lift was used when it was purchased by the Authority in 2007. Substantial maintenance and repair work has been required over the years. Ex: Hydraulic rams had to be rebuilt, drive motors had to be rebuilt and main drive gear had to be rebuilt.

This aerial lift has proven to be an invaluable tool around the pumping plants. It allows the crews to perform work faster and much more safely than on a ladder or other means.

Renting this equipment would have an annual rental cost of approximately \$12,000 to \$15,000. Therefore, the payback for purchasing a replacement is approximately 4 years. The expected life of a new lift is twenty plus years. Owning this equipment allows the crews more flexibility with scheduling and better response for emergency work.

The lift is starting to require more maintenance and its reliability is questionable.

Date Prepared: 10/3/2019

**SAN LUIS & DELTA-MENDOTA WATER AUTHORITY
EQUIPMENT REPLACEMENT JUSTIFICATION FORM
FY2021**

4,000 LB FORKLIFT

ESTIMATE COST: \$35,000

EXISTING EQUIPMENT INFORMATION

VEHICLE NO: 664	YEAR: 1989	AGE (YRS.): 31
MAKE: Hyster	MODEL: 4,000 Lb. LPG	
DEPARTMENT: Jones Pumping Plant	MAINTENANCE YARD: TFO	
CURRENT Hours: 6,500 Hr	PROJECTED HOURS WHEN REPLACED:	6,600
MECHANICS RATING OF VEHICLE:	POOR: X	FAIR: GOOD:

DESCRIPTION AND JUSTIFICATION

DESCRIPTION OF EQUIPMENT USE WITHIN THE AUTHORITY:

This forklift was a used forklift that we obtained from the Defense Reutilization and Marketing Office (DRMO) in 1996. It is an essential piece of equipment used for material handling at the Plant.

REASON (S) FOR REPLACEMENT:

This forklift has an engine that is not viable to repair. The engine requires a replacement and a complete overhaul which would cost approximately \$8,000. It also has hydraulic leaks and the brakes are beginning to fail. A total repair costs would exceed \$15,000. It is recommended for replacement rather than repair.

Date Prepared: 10/3/2019

**SAN LUIS & DELTA-MENDOTA WATER AUTHORITY
EQUIPMENT REPLACEMENT JUSTIFICATION FORM
FY2021**

MOTOR GRADER

ESTIMATE COST: \$283,000

EXISTING EQUIPMENT INFORMATION

VEHICLE NO: 2613	YEAR: 1993	AGE (YRS.): 26
MAKE: John Deere	MODEL: 772	
DEPARTMENT: Maintenance	MAINTENANCE YARD: TFO	
CURRENT HOURS: 6,000	PROJECTED HOURS WHEN REPLACED:	6,200
MECHANICS RATING OF VEHICLE:	POOR: X	FAIR: GOOD:

DESCRIPTION AND JUSTIFICATION

DESCRIPTION OF EQUIPMENT USE WITHIN THE AUTHORITY:

A replacement grader was approved in FY 2020 with a second grader scheduled for inclusion in the budget for FY 2021. Due to a special pricing offered for the purchase of the initial replacement grader to purchase two graders with the second purchased with a zero-interest loan with a balloon payment in June, 2020, the Board approved at the June 2019 Board meeting the purchase of the second grader to be funded in FY2021. This budget line item is to provide the funds necessary to make the balloon loan payment in June, 2020.

The grader is used in work associated with the maintenance and repair of the DMC roads and associated facilities. These include but are not limited to.

- Routine grading of roads
- Repair to roads
- Leveling ground
- Ripping ground
- Laying road base

This piece of equipment is used approximately 600 hours per year.

REASON (S) FOR REPLACEMENT:

This motor grader will be 26 years old at the time of replacement. 2 extremely reliable graders are necessary to ensure the reliability and proper maintenance of the DMC.

Date Prepared: 10/3/2019

**SAN LUIS & DELTA-MENDOTA WATER AUTHORITY
EQUIPMENT REPLACEMENT JUSTIFICATION FORM
FY2021**

AGRICULTURAL TRACTOR

ESTIMATE COST: \$156,000

EXISTING EQUIPMENT INFORMATION

VEHICLE NO: 2659	YEAR: 1999	AGE (YRS.): 21
MAKE: Case	MODEL: MX150	
DEPARTMENT: Civil Maintenance	MAINTENANCE YARD: TFO	
CURRENT Hours: 5,222	PROJECTED HOURS WHEN REPLACED:	5,550
MECHANICS RATING OF VEHICLE:	<i>POOR:</i>	<i>FAIR: X</i> <i>GOOD:</i>

DESCRIPTION AND JUSTIFICATION

DESCRIPTION OF EQUIPMENT USE WITHIN THE AUTHORITY:

This tractor is used for disking and other earth work in support of maintenance along the DMC right-of-way and other Water Authority facilities.

REASON (S) FOR REPLACEMENT:

In order to meet California Air Resources Board (CARB) emission standards, this tractor needs to be replaced by 2022.

This tractor will be traded in with the purchase of the new tractor to reduce the purchase price.

Date Prepared: 10/3/2019

**SAN LUIS & DELTA-MENDOTA WATER AUTHORITY
EQUIPMENT PURCHASE JUSTIFICATION FORM
FY2021**

MOWER-14 FOOT

ESTIMATE COST: \$23,000

EXISTING EQUIPMENT INFORMATION

VEHICLE NO: 2644	YEAR: 1992	AGE (YRS.): 27
MAKE: Rhino	MODEL: 6140	
DEPARTMENT: Los Banos Civil Maintenance	MAINTENANCE YARD: LBFO	
CURRENT HOURS:	PROJECTED HOURS WHEN REPLACED:	
MECHANICS RATING OF VEHICLE:	<i>POOR:</i>	<i>FAIR:</i> <i>GOOD:</i>

DESCRIPTION AND JUSTIFICATION

DESCRIPTION OF EQUIPMENT USE WITHIN THE AUTHORITY:

The mower will be used for mechanical weed control in areas where disking is causing problems with erosion along the DMC right-of-way embankment.

REASON FOR PURCHASE:

Mower 2644 was surplused in 2019 as it was unusable due to the fact that repairs are too extensive and not feasible due to the high cost.

The crew typically discs along the canal right-of-way as a means of mechanical weed control. In certain areas, the disking is accelerating embankment erosion during the rainy season. Mowing these areas instead will allow the roots to stay in place along the canal embankment to prevent erosion and therefore reduce maintenance work related to erosion repairs.

Date Prepared: 10/3/2019

***San Luis & Delta-Mendota Water Authority
Extraordinary O&M Projects
Project Description and Justification Sheet***

Project No.: V1999002

Project Code: D1-2021

Priority: B-6-c

Facility: ALL

Project Lead: SENG

Project Title: Vehicle Replacement (Reserve Fund)

IN-HOUSE COSTS: Labor: \$0.00

Materials: \$0.00

Equipment: \$0.00

CONTRACT COSTS: \$96,600.00

Estimated Total Cost:

\$96,600

Project Description and Scope:

The San Luis & Delta-Mendota Water Authority vehicles will be replaced or considered for replacement when the criteria for the Authority Vehicle Replacement Policy has been met. The purpose of this Reserve Project is to set-aside funding annually for replacement of the Authority vehicles. The Authority Vehicle Replacement Plan will be presented for approval each year.

Project Purpose and Background:

The San Luis & Delta-Mendota Water Authority Vehicle Replacement Policy objective is to provide safe and efficient operating vehicles in a manner which maximizes the vehicles utilization for the Authority.

Project Status:

See attached Vehicle Replacement 10 Year Plan.

		A		B		C		D		E														
Veh No.	FRONT LINE VEHICLE DESCRIPTION	2020	Vehicle User	Model Year	Assigned To:	Est. MILEAGE ON 3/1/2020	Average Miles Per Year	Calculated Years to Replacement (150K or 15 yrs) ^{1,2}	Calculated FY for Replacement (Mileage or Age)	Est. Mileage at Replacement	Proposed FY for Replacement	Estimated Replacement Cost (FY2019\$)	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		
					Current Calendar Year (CCY) =	2020	B ÷ (CCY - A)	(150K-B) ÷ C or 15 yrs	Current FY+D or <u>A + 15 yrs</u>	B + (E-Current FY) x C	To be reviewed each year	To be updated each year												
8076	1/2 Ton Pickup		B. Soares	2011	LBFO Civil Maint.	156,936	19,580	-1	2019	156,936	2021	\$24,000	\$24,000									\$24,000		
8074	3/4 Ton Pickup w/Utility Body ²		L. Simonich	2011	TFO Canal Operations	155,123	15,376	-4	2016	155,123	2021	\$40,000	\$40,000					\$40,000						
8032	3/4 Ton Pickup		M. Garcia	2006	LBFO Civil Maint.	100,079	5,100	10	2021	100,079	2021	\$27,000	\$27,000											
2601	3/4 Ton Pickup		JPP	2001	JPP Machine Shop	73,428	1,840	15	2016	75,268	2022	\$24,000		\$24,000										
2606	3/4 Ton Pickup w/Utility Body		M. Izoco	2002	Oneill PP	60,150	1,000	15	2017	61,150	2022	\$40,000		\$40,000										
8035	3/4 Ton Pickup w/Utility Body		ESHOP	2006	TFO Civil Maint.	78,340	2,000	15	2021	80,340	2022	\$40,000		\$40,000										
8034	3/4 Ton Pickup w/Utility Body		ESHOP	2006	TFO Electric Shop	74,202	2,800	15	2021	77,002	2022	\$40,000		\$40,000										
8033	3/4 Ton Pickup		J. Miller	2006	JPP Machine Shop	77,227	800	15	2021	78,027	2022	\$27,000		\$27,000										
8091	Small SUV		J. Lenhardt	2013	Safety Engineer	74,382	7,000	8	2028	88,382	2023	\$29,000			\$29,000									
8062	1/2 Ton Pickup		J. Amaya	2009	TFO Electric Shop	77,727	2,500	15	2024	82,727	2023	\$24,000			\$24,000									
8073	3/4 Ton 4x4 Pickup		J. Weisenberger	2011	TFO Civil Maint.	66,450	9,986	9	2026	86,422	2023	\$32,000			\$32,000									
8086	1/2 Ton Pickup		R. Nazabel	2012	TFO Civil Maint.Foreman	90,532	11,886	6	2026	114,304	2023	\$24,000			\$24,000									
8129	1/2 Ton Ext Cab 4X4 ²		P. Nacci	2018	LBFO Canal Operations	66,790	36,800	3	2023	140,390	2023	\$30,500			\$30,500					\$30,500				
8108	Small SUV		B. Martin	2016	Engineering Manager	76,843	14,600	6	2026	106,043	2023	\$30,000			\$30,000						\$30,000			
8107	3/4 Ton Pickup w/Utility Body ²		G. Dingman	2016	TFO Canal Operations	66,101	18,400	5	2025	121,301	2024	\$40,000				\$40,000					\$40,000			
8122	1/2 Ton Pickup ²		K. Silva	2017	TFO Canal Operations	66,310	24,600	2	2022	140,110	2024	\$24,000				\$24,000					\$24,000			
8127	Toyota Prius ¹		F. Mizuno	2017	Asst Executive Director	39,583	18,300	1	2021	94,483	2024	\$28,000				\$28,000					\$28,000			
8124	1/2 Ton Pickup		J. Oxenrider	2017	Operations Supervisor	58,652	21,600	5	2025	123,452	2024	\$24,000				\$24,000								
8123	1/2 Ton Pickup ²		Rodney Huff	2017	LBFO Canal Operations	68,416	12,500	2	2022	105,916	2024	\$24,000				\$24,000					\$24,000			
8119	1/2 Ton Ext Cab 4X4 ²		Walsh	2017	LBFO Eng. HT3	75,742	26,500	2	2022	155,242	2024	\$36,000				\$36,000					\$36,000			
8069	3/4 Ton Pickup		Equip. Oper	2010	TFO Civil Maint.	79,233	6,512	11	2025	105,281	2025	\$27,000				\$27,000								
8131	1/2 Ton Pickup		C. Lee	2018	Watermaster	35,431	20,500	6	2026	117,431	2025	\$24,000					\$24,000							
8120	Mid Sized Sedan		S. Davis	2017	IT	66,075	24,000	4	2024	162,075	2025	\$26,500					\$26,500							
8141	1/2 Ton Pickup		R. Martin	2018	LBFO Canal Operations	34,124	27,000	5	2025	142,124	2025	\$24,000					\$24,000							
8118	1/2 Ton Pickup		A. Singh	2017	Mechanical Engineer	31,778	10,500	12	2032	94,778	2027	\$24,000							\$24,000					
8061	1 Ton Pickup w/Utility Body		JPP	2009	JPP Machine Shop	15,159	1,100	15	2024	21,759	2027	\$46,000							\$46,000					
8081	Small SUV		D. Lakey	2012	SCADA Integrator	49,149	6,000	15	2027	85,149	2027	\$27,000							\$27,000					
8110	3/4 Ton Pickup w/Utility Body		A. Jorge	2016	LBFO Civil Maint	47,157	13,700	8	2028	129,357	2027	\$40,000							\$40,000					
8103	3/4 Ton Pickup. 4WD		Robert Huff	2014	LBFO Civil Maint	72,527	10,100	8	2028	133,127	2027	\$32,000							\$32,000					
8098	Minivan-Service Van		Y. Suarez	2013	OPP C&I	32,533	5,860	15	2028	73,553	2028	\$26,000								\$26,000				
8105	1 Ton Utility Truck-Diesel		CMLB	2014	LBFO Civil Maint.	69,060	12,365	7	2027	167,980	2029	\$60,000									\$60,000			
8106	1 Ton Utility Truck - Diesel		T. Romero	2014	TFO Civil Maint.	18,235	3,200	15	2029	43,835	2029	\$60,000									\$60,000			
8111	1 Ton Pickup w/Utility Body		R. Bertao	2016	LBFO Civil Maint	16,709	4,000	15	2031	52,709	2030	\$45,000										\$45,000		
8142	Small SUV		S. Petersen	2019	Water Policy Director	12,000	10,000	14	2034	82,000	2028	\$25,000								\$25,000				
8137	3/4 Ton Pickup w/Flat Bed (Spray Truck)		CMLB	2018	LBFO Civil Maint.	17,960	16,600	8	2028	217,160	2033	\$34,000												
8139	1 Ton Pickup w/Utility Body - Diesel		CMT	2018	TFO Civil Maint.	14,969	15,000	10	2030	134,969	2029	\$60,000									\$60,000			
8140	1 Ton Pickup w/Utility Body - Diesel		CMLB	2018	LBFO Civil Maint.	17,600	15,000	9	2029	137,600	2029	\$60,000									\$60,000			
8144	Small SUV		A. Garcia	2019	Civil Engineer-Ground Water	12,000	15,000	10	2030	147,000	2030	\$30,000										\$30,000		
8143	1/2 Ton Pickup. 4WD. Crew Cab		P. Stearns	2019	Operations Manager	27,000	26,400	5	2025	159,000	2026	\$33,000						\$33,000						
8147	3/4 Ton Pickup w/Utility Body ²		M. Costa	2019	LBFO Canal Operations	15,000	30,400	4	2024	136,600	2025	\$40,000					\$40,000					\$40,000		
8146	1/2 Ton Pickup		S. Posey	2019	LBFO Canal Operations	20,000	35,200	4	2024	160,800	2025	\$24,000					\$24,000					\$24,000		
8041	1 Ton Pickup w/Utility Body - Diesel		CMT	2007	TFO Civil Maint.	152,000	9,200	-1	2019	142,800	2020	\$60,000								\$60,000				
Notes:													42											
1. Exec. Director & Asst. Exec. Director vehicles to be replaced every 5 years and reassigned to another Department.																								
2. TFO & LBFO Canal Operations high mileage vehicles shall be replaced every 5 or 6 years and reassigned to another Department.																								
3. Vehicle mileage reflects partial year use.																								
													Total		\$ 91,000	\$ 171,000	\$ 169,500	\$ 176,000	\$ 165,500	\$ 73,000	\$ 169,000	\$ 141,500	\$ 422,000	\$ 163,000
													# of Vehicles Replaced		3	5	6	6	6	2	5	4	10	5
													3% Inflation Factor per Year		\$ 5,542	\$ 10,414	\$ 15,717	\$ 22,090	\$ 26,360	\$ 14,166	\$ 38,849	\$ 37,748	\$ 128,614	\$ 56,058
													Total Dollar Amount		\$ 96,600	\$ 181,500	\$ 185,300	\$ 198,100	\$ 191,900	\$ 87,200	\$ 207,900	\$ 179,300	\$ 550,700	\$ 219,100
NOTE: Vehicle replacement costs rounded up to the nearest \$500.																				Grand Total		\$ 2,001,000		

Notes:

- Exec. Director & Asst. Exec. Director vehicles to be replaced every 5 years and reassigned to another Department.
- TFO & LBFO Canal Operations high mileage vehicles shall be replaced every 5 or 6 years and reassigned to another Department.
- Vehicle mileage reflects partial year use.

**SAN LUIS & DELTA-MENDOTA WATER AUTHORITY
VEHICLE REPLACEMENT JUSTIFICATION FORM
FY2021**

1/2 TON PICKUP

ESTIMATE COST: \$24,000

EXISTING VEHICLE INFORMATION

VEHICLE NO: 8076 **YEAR:** 2011 **AGE (YRS.):** 9
MAKE: Ford **MODEL:** F150
DEPARTMENT: Canal Maintenance **MAINTENANCE YARD:** LBFO
CURRENT MILEAGE: 142,250 **PROJECTED MILEAGE WHEN REPLACED:** 157,000
MECHANICS RATING OF VEHICLE: *POOR:* *FAIR:* **X** *GOOD:*

DESCRIPTION AND JUSTIFICATION

DESCRIPTION OF VEHICLE USE WITHIN THE AUTHORITY:

This vehicle is used by the Canal Maintenance Superintendent.
Duties include:

- Supervision of maintenance and repair activities along the DMC and at all facilities
- Routine inspection of facilities
- Attend meetings at remote locations
- Emergency response

REASON (S) FOR REPLACEMENT:

Authority policy is to replace vehicles at 150,000 miles or 15 years. This vehicle will exceed 150,000 miles in FY21

This vehicle will be reassigned to another department as a secondary vehicle.

INTENDED USE AFTER REPLACEMENT:

REASSIGNMENT TO: Control Room Operations *SURPLUS:*

VEHICLE TO BE SURPLUSED:

VEHICLE NO: 8093 **YEAR:** 2004 **AGE (YRS.):** 15
MAKE: Chevy **MODEL:** Silverado
DEPARTMENT: Control Room Operations **MAINTENANCE YARD:**
CURRENT VEHICLE MILEAGE: 188,000
MECHANICS RATING OF VEHICLE: *POOR:* **X** *FAIR:* *GOOD:*
GENERAL NOTE:

Date Prepared: 10/3/2019

**SAN LUIS & DELTA-MENDOTA WATER AUTHORITY
VEHICLE REPLACEMENT JUSTIFICATION FORM
FY2021**

¾ TON PICKUP WITH UTILITY BODY

ESTIMATE COST: \$40,000

EXISTING VEHICLE INFORMATION

VEHICLE NO: 8074	YEAR: 2011	AGE (YRS.): 9
MAKE: Ford	MODEL: F250	
DEPARTMENT: Canal Operations	MAINTENANCE YARD: TFO	
CURRENT MILEAGE: 144,000	PROJECTED MILEAGE WHEN REPLACED:	155,200
MECHANICS RATING OF VEHICLE:	POOR:	FAIR: X GOOD:

DESCRIPTION AND JUSTIFICATION

DESCRIPTION OF VEHICLE USE WITHIN THE AUTHORITY:

This vehicle is assigned to TFO Canal Operations. It is used for routine meter repairs and operations associated with the DMC. These functions include but not limited to:

- Routine servicing meters
- Performing flow testing
- Routine operation of the DMC

REASON (S) FOR REPLACEMENT:

Due to the high use of vehicles by the Canal Operations department and a need to have a reliable vehicle, Canal Operations vehicles are routinely scheduled for replacement every 5 to 6 years or 150,000 miles. This vehicle will be 9 years old and will exceed 150,000 miles in FY21.

This vehicle will be reassigned to another department as a secondary vehicle

INTENDED USE AFTER REPLACEMENT:

REASSIGNMENT TO: OPP

SURPLUS:

VEHICLE TO BE SURPLUSSED:

VEHICLE NO: 8075	YEAR: 2011	AGE (YRS.): 9
MAKE: Ford	MODEL: F250	
DEPARTMENT: OPP	MAINTENANCE YARD: LB	
CURRENT VEHICLE MILEAGE: 172,000		
MECHANICS RATING OF VEHICLE:	POOR: X FAIR:	GOOD:
GENERAL NOTE:		

Date Prepared: 10/3/2019

**SAN LUIS & DELTA-MENDOTA WATER AUTHORITY
VEHICLE REPLACEMENT JUSTIFICATION FORM
FY2021**

¾ TON PICKUP

ESTIMATE COST: \$27,000

EXISTING VEHICLE INFORMATION

VEHICLE NO: 8032	YEAR: 2006	AGE (YRS.): 14
MAKE: Ford	MODEL: F250	
DEPARTMENT: Maintenance	MAINTENANCE YARD: LBFO	
CURRENT MILEAGE: 96,254	PROJECTED MILEAGE WHEN REPLACED: 100,100	
MECHANICS RATING OF VEHICLE: POOR: X FAIR: GOOD:		

DESCRIPTION AND JUSTIFICATION

DESCRIPTION OF VEHICLE USE WITHIN THE AUTHORITY:

This vehicle is assigned to an Equipment Operator. It is used for routine transportation to and from worksites and to provide routine daily service on WA heavy equipment. These functions include but not limited to:

- Routine daily servicing of heavy equipment at job sites
- Heavy Equipment repairs at job sites
- Transportation to and from remote job sites

REASON (S) FOR REPLACEMENT:

Vehicle is 14 Years old. The WA replaces vehicles at 150,000 miles or 15 years. This vehicle needs approximately \$4,000 worth of repairs due to failed AC system and front suspension work. The Equipment Operators require highly reliable vehicles in order to ensure they are able to reach job sites and provide daily service support to WA heavy equipment

This vehicle will be disposed of

INTENDED USE AFTER REPLACEMENT:

REASSIGNMENT TO: Undecided

SURPLUS:

VEHICLE TO BE SURPLUSED:

VEHICLE NO:	YEAR:	AGE (YRS):
MAKE:	MODEL:	
DEPARTMENT:	MAINTENANCE YARD:	
CURRENT VEHICLE MILEAGE:		
MECHANICS RATING OF VEHICLE: POOR: FAIR: GOOD:		
GENERAL NOTE:		

Date Prepared: 9/15/2015

***San Luis & Delta-Mendota Water Authority
Extraordinary O&M Projects
Project Description and Justification Sheet***

Project No.: C2011001

Project Code: D3-2021

Priority: B-7-c

Facility: ALL

Project Lead: CIVIL

Project Title: Facility Infrastructure Replacement/Rehabilitation Program

IN-HOUSE COSTS: Labor: \$0.00

Materials: \$0.00

Equipment: \$0.00

CONTRACT COSTS: \$170,000.00

Estimated Total Cost:

\$170,000

Project Description and Scope:

The reserve funds set aside for this project will be utilized for planned repairs/rehabilitation and/or improvements to the facilities the SLDMWA has the responsibility to operate and maintain. The typical type of project to be funded will be associated with facility repairs/rehabilitation and/or improvements in the following areas: Roofing Systems, Building Interior/Exterior Components, Building HVAC Systems, Building Electrical & Communication Systems, Building Plumbing Systems, Building Fire Protections Systems, and Building Pavement & Grounds.

Project Purpose and Background:

The San Luis & Delta-Mendota Water Authority is responsible for the operation, maintenance, rehabilitation and replacement of C.W. "Bill" Jones Pumping Plant, O'Neill Pumping/Generating Plant and all the support O&M facilities. The majority of the facilities were constructed in the 1950's and 1960's and the existing buildings on the Tracy Compound were built in 1996. The purpose of this reserve fund is to fund required repairs/rehabilitation projects as they are needed.

Project Status:

See attached Facility Infrastructure 10 Year Plan.

	How Often (Yrs)	Est. Cost (x1000) in 2014\$	Year Last Performed	Forecasted Years	2021	2022	2023	2024	2025	2026	2027	2028	2029	2029
Tracy Field Office Facilities					\$ 15	\$ 196	\$ 46	\$ 52	\$ 77	\$ 43	\$ 16	\$ -	\$ 45	\$ -
Entire O&M Compound					\$ -	\$ -	\$ 46	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 45	\$ -
Asphalt Pavement Areas					\$ -	\$ -	\$ 46	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Seal Coat Surfacing & Striping (incl USBR Lot)					5	41	2017	2022						
Alarm & Security Systems					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fire Alarm System Replacement					30	20	2011	2041						
Security System Replacement					20	25	2012	2032						
Wash Water Recycling System					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Recycling System Replacement					20	75	1996	2016						
Aboveground Fuel Storage System					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 45	\$ -
Tank Replacement					40	20	1996	2036					\$ 20	
Fuel Dispensing System Replacement					15	20	2015	2030					\$ 20	
Fuel Management Software Replacement (1995)					15	5	2015	2030					\$ 5	
Control Building (68 Years Old)					\$ 15	\$ -	\$ -	\$ 15	\$ -	\$ -	\$ 10	\$ -	\$ -	\$ -
Roofing Systems					\$ 15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roof Re-seal/Overlay/Replacement					20	15	1998	2018						
Building Interior/Exterior Components					\$ -	\$ -	\$ -	\$ 15	\$ -	\$ -	\$ 10	\$ -	\$ -	\$ -
Interior Maintenance (Painting)					20	10	2007	2027			\$ 10			
Kitchen Remodel					25	15	1980	2005						
Flooring Replacement (Carpet/Tile)					20	15	2007	2027						
Building HVAC					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Heater System Replacement					20	10	2011	2031						
Air Conditioning System Replacement					20	30	2011	2031						
Ventilation System Replacement					20	10	2011	2031						
Warehouse Building (24 Years Old)					\$ -	\$ -	\$ -	\$ 20	\$ 27	\$ 18	\$ 6	\$ -	\$ -	\$ -
Roofing Systems					\$ -	\$ -	\$ -	\$ -	\$ 27	\$ -	\$ -	\$ -	\$ -	\$ -
Roof Repair/Replacement					25	25	1996	2021		\$ 27				
Building Interior/Exterior Components					\$ -	\$ -	\$ -	\$ 20	\$ -	\$ 18	\$ 6	\$ -	\$ -	\$ -
Exterior Maintenance (Painting)					40	15	1996	2036						
Interior Maintenance (Painting)					20	5	2007	2027			\$ 6			
Kitchen Remodel					30	15	1996	2026		\$ 18				
Flooring Replacement (Carpet/Tile)					20	20	2007	2027		\$ 20				
Building HVAC					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Heater System Replacement					20	15	1996	2016						
Air Conditioning System Replacement					20	18	1996	2016						
Ventilation System Replacement					20	10	1996	2016						
Building Fire Protection System					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Component Replacement (Sprinklers & Detectors)					50	10	1996	2046						

	How Often (Yrs)	Est. Cost (x1000) in 2014\$	Year Last Performed	Forecasted Years	2021	2022	2023	2024	2025	2026	2027	2028	2029	2029
<u>Adminstration/Electric Shop Building (24 Years Old)</u>					\$ -	\$ -	\$ -	\$ 17	\$ 25	\$ -	\$ -	\$ -	\$ -	\$ -
Roofing Systems					\$ -	\$ -	\$ -	\$ -	\$ 25	\$ -	\$ -	\$ -	\$ -	\$ -
Roof Repair/Replacement	25	25	1996	2021					\$ 25					
Building Interior/Exterior Components					\$ -	\$ -	\$ -	\$ 17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Exterior Maintenance (Painting)	40	15	1996	2036										
Interior Maintenance (Painting)	20	10	2013	2033										
Office Partition Replacement	20	25	2013	2033										
Kitchen/Lunch Room Remodel	20	15	1996	2016				\$ 17						
Flooring Replacement (Carpet/Tile)	20	15	2013	2033										
Building HVAC					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Heater System Replacement	20	35	1996	2016										
Air Conditioning System Replacement	20	35	1996	2016										
Ventilation System Replacement	20	20	1996	2016										
Building Fire Protection System					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Component Replacement (Sprinklers & Detectors)	50	10	1996	2046										
<u>Civil/Vehicle Maintenance Building (24 Years Old)</u>					\$ -	\$ -	\$ -	\$ -	\$ 25	\$ -	\$ -	\$ -	\$ -	\$ -
Roofing Systems					\$ -	\$ -	\$ -	\$ -	\$ 25	\$ -	\$ -	\$ -	\$ -	\$ -
Roof Repair/Replacement	25	25	1996	2021					\$ 25					
Building Interior/Exterior Components					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Exterior Maintenance (Painting)	40	15	1996	2036										
Interior Maintenance (Painting)	20	10	2014	2034										
Flooring Replacement (Tile)	25	20	2020	2045										
Building HVAC					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Heater System Replacement	20	10	1996	2016										
Air Conditioning System Replacement	20	10	1996	2016										
Shop Ventilation System Replacement	20	10	1996	2016										
Building Fire Protection System					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Component Replacement (Sprinklers & Detectors)	50	10	1996	2046										
<u>Sandblast and Paint Building (18 Years Old)</u>					\$ -	\$ 196	\$ -	\$ -	\$ -	\$ 25	\$ -	\$ -	\$ -	\$ -
Roofing Systems					\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25	\$ -	\$ -	\$ -	\$ -
Roof Repair/Replacement	25	25	2002	2027						\$ 25				
Building Interior/Exterior Components					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Exterior Maintenance (Painting)	40	15	2002	2042										
Blast Room Air Flow System					\$ -	\$ 196	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Filter Replacement	10	15	2012	2022		\$ 21								
Air Compressor Replacement	20	50	2002	2022		\$ 50								
Shop Ventilation System Replacement	20	50	2002	2022		\$ 50								
Media Collection System	20	75	2002	2022		\$ 75								
Building Fire Protection System					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Component Replacement (Sprinklers & Detectors)	30	10	2002	2032										

	How Often (Yrs)	Est. Cost (x1000) in 2014\$	Year Last Performed	Forecasted Years	2021	2022	2023	2024	2025	2026	2027	2028	2029	2029
Los Banos Field Office & Maintenance Facility					\$ 150	\$ -	\$ -	\$ 77	\$ -	\$ 37	\$ -	\$ 87	\$ 45	\$ 25
Entire O&M Compound					\$ 150	\$ -	\$ -	\$ 77	\$ -	\$ -	\$ -	\$ 45	\$ 45	\$ 25
Asphalt Pavement Areas					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25
Seal Coat Surfacing & Striping (2009)	10	20	2019	2029										\$ 25
Alarm & Security Systems					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 45	\$ -	\$ -
Fire Alarm System Replacement (2008)	20	20	2008	2028								\$ 20		
Security System Replacement (2008)	20	25	2008	2028								\$ 25		
Domestic Water Well					\$ 150	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Well Replacement	25	150	2021	2046	\$ 150									
Wash Water Recycling System					\$ -	\$ -	\$ -	\$ 77	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Recycling System Replacement (2004)	20	75	2004	2024				\$ 77						
Aboveground Fuel Storage System					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 45	\$ -
Tank Replacement (1993)	40	20	1993	2033									\$ 20	
Fuel Dispensing System Replacement	15	20	2015	2030									\$ 20	
Fuel Management Software Replacement (1993)	15	5	2015	2030									\$ 5	
Office Building (13 Years Old)					\$ -	\$ -	\$ -	\$ -	\$ -	\$ 37	\$ -	\$ 42	\$ -	\$ -
Roofing Systems					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roof Repair/Replacement (2008)	25	25	2008	2033										
Building Interior/Exterior Components					\$ -	\$ -	\$ -	\$ -	\$ -	\$ 37	\$ -	\$ -	\$ -	\$ -
Exterior Maintenance (Painting)	40	30	2008	2048										
Interior Maintenance (Painting) (2008)	20	10	2008	2028						\$ 10				
Office Partition Replacement (2008)	20	15	2008	2028						\$ 17				
Flooring Replacement (Carpet/Tile)(2008)	20	10	2008	2028						\$ 10				
Building HVAC					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 42	\$ -	\$ -
Heater System Replacement (2008)	20	20	2008	2028								\$ 20		
Air Conditioning System Replacement (2008)	20	20	2008	2028								\$ 22		
Los Banos Administration Office Facility					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10	\$ -	\$ -	\$ -
Office Building					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10	\$ -	\$ -	\$ -
Offices					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10	\$ -	\$ -	\$ -
Interior Maintenance (Painting)	20	15	2000	2020										
Office Partition Replacement	20	10	2008	2028							\$ 10			
Flooring Replacement (Carpet/Tile)	20	25	2000	2020										
Alarm & Security Systems					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Security Alarm System Replacement	20	10	2000	2020										
Building Plumbing System					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Kitchen/Lunchroom Remodel	20	18	1992	2012										
TOTALS (x \$1000)					\$ 165	\$ 196	\$ 46	\$ 129	\$ 77	\$ 80	\$ 26	\$ 87	\$ 91	\$ 25
3% Inflation Factor per Year (x \$1000)					\$ 5	\$ 12	\$ 4	\$ 16	\$ 12	\$ 16	\$ 6	\$ 23	\$ 28	\$ 9
Yearly Total (x \$1000)					\$ 170	\$ 208	\$ 50	\$ 145	\$ 89	\$ 96	\$ 32	\$ 110	\$ 118	\$ 34
10 Year Grand Total														\$ 1,052

Project No.: E2000004	Project Code: D0-2021	Priority: C-6-b
Facility: ALL	Project Lead: <u>NETW</u>	
Project Title: Replace Computer/Network Communication Equip (Reserve Fund)		
IN-HOUSE COSTS:	Labor: \$0.00	Materials: \$113,000.00 Equipment: \$0.00
CONTRACT COSTS: \$0.00	Estimated Total Cost:	\$113,000

The computer/network communication equipment scheduled to be replaced this FY is summarized on the attached 10 year plan.

To ensure that our computer equipment is both operational and is of the capacity to operate current versions of application software, the Authority has a proactive plan to upgrade/replace computer communications equipment rather than react to emergency replacement needs and placing business communications at risk. A 10-year plan was developed to estimate future communications & computer equipment replacement needs. Copiers and fax machines are included in this 10 year plan. The planned replacement of these office machines is necessary based on cost and business function. Forecasting this equipment with network systems also provides the ability to explore combining technologies, i.e. copier with network printing, which may reduce maintenance and supply costs. The SCADA network computers, switches and associated components were added to this project starting FY09. The inclusion of this equipment brings all computer network purchases and control into one project with one manager overseeing purchases and ensuring all equipment meets the minimum requirements and is on a schedule for replacements.

Reserve Fund

San Luis & Delta-Mendota Water Authority
Extraordinary O&M Projects
Project Description and Justification Sheet

Project No.: E1999001 ***Project Code:*** F4-2021 ***Priority:*** B-3-a

Facility: JPP

Project Lead: MENG

Project Title: Unit Rewind - Phase 4 (U1 & U4 partial)

IN-HOUSE COSTS: Labor: \$0.00

Materials: \$0.00

Equipment: \$0.00

CONTRACT COSTS: \$6,238,400.00

Estimated Total Cost:

\$6,238,400

Project Description and Scope:

This phase involves the refurbishment of JPP Unit 1 motor and a portion of Unit 4's. (Contract Costs Only - No Labor) The scope of work is to manufacture new stator coils, rewind the stator, manufacture new stator laminations and vents, stack the core and reinsulate the rotor coils. After completion of a unit, performance testing meeting the requirements of the contract documents is required.

FUNDING NOTE: The rewind work for each unit will be completed in 9 months. As a result, the FY cost includes the entire cost for one unit and only a portion of the following unit. The SLDMWA is negotiating with the USBR to provide the necessary funding for two of the remaining four units (Units 1 and 5) through a Repayment Contract. In addition, the SLDMWA has submitted an application for federal financing through the EPA's WIFIA Program for the entire Project. If WIFIA financing is not approved, alternate funding for Units 3 & 4 will be necessary.

Project Purpose and Background:

The six (6) motor stators at the Jones Pumping Plant (JPP) were refurbished between 1977 and 1984. The typical service life of a unit stator winding is 25 years. In 2015, the age of the unit stator windings was between 31 and 38 years old. Phase 1 of this multi-phased project was funded and completed in FY15. During this phase, the USBR performed a condition assessment on all six (6) JPP units and the findings were that all the units were at the end of their service life. A rewind order was developed based on the test information during this phase as well. The rewind priority order is Unit 6, 2, 1, 4, 3 & 5. Phase 2 was funded in FY18 and completed in FY19 and it included the design and rewind of JPP Unit 6. Phase 3 was funded in FY20 and included the development of the contract documents for the rewind of the remaining 5 JPP units and the rewind of JPP Unit 2.

NOTE: The impact of this project if not accomplished is that the Jones Pumping Plant (JPP) unit reliability is decreased and has the high potential to cause unit failures.

Project Status:

FY2015 - Phase 1 - Condition Assessment - Funded by SLDWMA and completed

FY2018 - Phase 2 - Design & Rewind of JPP Unit 6 - Financed by USBR and completed

FY2020 - Phase 3 - Develop Contract Documents for remaining 5 Units & Rewind Unit 2 - Funded by SLDMWA and contract awarded for remaining units - contract work in progress

FY2021 Project - Awaiting approval/funding - Unit 1 & 4 partial (Seeking USBR Financing for Unit 1)

FY2022 Project - Awaiting approval/funding - Unit 4 & 3 partial

FY2023 Project - Awaiting approval/funding - Unit 3 & 5 partial (Seeking USBR Financing for Unit 5)

FY2024 Project - Awaiting approval/funding - Unit 5