



November 1, 2021

To: Finance & Administration Committee Members

From: Pablo Arroyave, Chief Operating Officer

**Subject: Proposed FY 2023 O&M Budget**

In preparation for the Finance & Administration Committee (FAC) meeting scheduled on November 1, 2021 at 12:00 pm, the proposed FY23 budget packet is included for your review.

The Operations & Maintenance Technical Committee (OMTC) met on October 18, 2021 and reviewed the proposed budget in detail and recommended approval of the FY23 O&M budget to the Finance and Administration Committee.

The proposed FY23 O&M Budget, in total, is \$28,543,128. In comparison to the FY22 budget of \$28,451,353, this is an overall increase of 0.32%. The total proposed self-funded portion paid by the water users is \$28,470,317, which is a 0.32% increase from the FY22 budget. The Routine Operation & Maintenance (RO&M) portion of the budget increased by 11.82%. (Note: This percentage does not include the USBR Funded O&M Service Contract budget) The Extraordinary Operations & Maintenance (EO&M) portion of the budget increased by 39.12% and the Capital Improvement Projects (CIP-USBR Funded) decreased by 48.6%. (See Table on page FAC 16 for the FY2022 Approved, Proposed FY23 Total Budget Summary information)

This budget includes a 3% salary adjustment placeholder. The Water Authority salary policy adopted, in 2004, provides for salary adjustments based on salary surveys every three years and in the in-between years on the Consumer Price Index (CPI) for Pacific Cities (West with less than 2,500,000 Population). In 2006, relative to salary placeholders, the Water Authority established a policy (Pages FAC 10-11) of basing salary adjustments on the four-month average CPI of August-November for any given year the index is used. This policy directs that the average of August and September's CPIs to be used as a placeholder in the initial proposed budget. The August/September CPI average is 6.2 based on the August 2021 CPI of 6.2 and the September 2021 CPI of 6.2. That being said, given the significant increase in CPI compared to last year and the expectation that the large monthly increases may be temporary, Staff has included a preliminary 3% increase placeholder, Staff noted this salary placeholder at the OMTC meeting.

Two new positions are proposed for FY23. These positions are needed to support both the Control Operations and O'Neill Plant Maintenance Departments. The OMTC agreed with the proposed positions and recommended revisions to the justifications provided to better define the need for the positions. The new positions and their updated justifications are identified below:

- 1) Apprentice Control Operator – see attached justification (Pages FAC 5-6)
- 2) Apprentice Plant Mechanic (OPP) – see attached justification (Pages FAC 7-8)

## Summary of Changes Between FY22 and FY23 Proposed O&M Budget

### **Routine O&M (RO&M) Budget increase of 11.82% or \$1,777K.**

#### **Parts, Materials and Services (\$348.1K increase)**

- Small Tools increased \$12.8K (34.33%)
  - Replacement defibrillators and CPR training equipment
- Clothing, Personal Protective Equipment (PPE) increased \$12.2K (33.93%)
  - Requirement for arc-flash rated clothing
  - Safety boot allowance raised to \$200 annually
- Legal decreased \$53K (-27.60%)
  - Adjusted to match current projects
- Other Professional Services increased \$11.9K (5.13%)
  - Adjusted to match current projects
- Other Services & Expenses increased \$138K (44.81%)
  - NetSuite CMMS Program
- Computer Software increased \$5.7K (13.67%)
  - Additional AutoCAD license
  - Software for PLC (programmable Logic Controller)
- Dues – Professional & Organizational decreased \$0.7K (-11.61%)
  - more closely match actual
- Conference & Training Costs increased \$38.7K (36.32%)
  - Training for electrical safety and Arc Flash
  - OSHA crane operator, testing and inspection training
  - Technical training for protective relays
- Employee and Group Meetings increased \$1.9K (7.66%)
  - Match actual expenditures
- Petroleum, Oil and Lubricants increased \$16.5K (6.95%)
  - Estimating cost to be \$3.50 per gallon for both diesel and unleaded
- Outside Services – Vehicles/Construction Equipment increased \$5.5K (8.26%)
  - Match actual expenditures. DEF issues with diesel engines
- Rents/Leases – Vehicles/Construction Equipment increased \$3.5K (7.0%)
  - Water truck rental during earth work; increased requirements due to Air Resources Board requirements

- Parts and Materials decreased by \$58.5K (-9.63%)
  - There was a net reduction in Special Projects of \$107.6K from FY22
  - Routine parts and materials were increased by \$49.1K to account for inflation and increased shipping costs
  - See Special Projects/Purchases
- Outside Services – Facilities and plant equipment increased by \$180.6K (82.6%)
  - There was a net increase in Special Projects of \$165K from FY22
  - The remaining increase is due to HVAC services at O’Neill
  - See Special Projects/Purchases
- Pipe, Metal and Treatments increased \$13K (36.31%)
  - Anticipated price increases, based on current pricing of ferrous and non-ferrous metals
- Sand, Backfill & Rock increased \$1.5K (11.11%)
  - Match actual expenditures
- Concrete and Paving Materials increased \$5K (20.0%)
  - Match actual expenditures
- Chemicals increased \$9.5K (7.11%)
  - Expected price increase
- Network Communications decreased \$7K (-8.24%)
  - Match actual expenditures
- Hazardous Waste Disposal increased \$23.5K (14.1%)
  - Match actual expenditures; tires
- Special Project overview, net increase of \$57.4K over FY22
  - OPP replacement of cooling water strainers, vacuum pump, sand filter control valves and servo-motor piston rings
  - JPP replacement shaft sleeves and circuit breaker upgrades
  - DCI replacement of protective relay and anode bed
  - Electrical test equipment; borescope, infra-red scope, oscilloscope, power quality meter
  - Replacement machine shop equipment; vertical mill and hydraulic iron worker
  - Engineering test equipment: Ultra-sonic thickness tester

### **Insurance Premiums and Fees**

- Increase of \$14K (5.82%)

### **Equipment/Capital Asset Purchases**

- Net decrease of \$13.35K from FY22 (6.76%)

### **Indirect Charges**

- Overall increase of \$123K in Indirect Charged to EO&M reserve

### **Extraordinary O&M (EO&M)**

EO&M projects budget increased by 39.12%, approximately \$2,141K. The in-house labor/benefits associated with the EO&M Projects increased by \$173.7K.

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

### **Capital Improvement Projects (CIP)**

CIP Project budget decreased by 48.6%, approximately \$3,827K. The CIP in-house labor for FY23 will have a direct impact to the RO&M labor budget.

**STAFFING JUSTIFICATION FORM**

**FY 2023**

**REQUEST DATE:** 10/18/21

**PRIORITY CODE:** - -

**EXPENSE CODE:** 5101

**DEPARTMENT:** 41

**Type of Purchase**

- Materials
- Services
- Other: Request for New Positions

**PROJECT DESCRIPTION:**

New Position: Apprentice Control Operator

**GENERAL SPECIFICATIONS:**

**(See attached information)**

<b><u>ESTIMATED COST</u></b>	<b><u>CURRENT O&amp;M COST INFORMATION</u></b>
<b>Salary Cost:</b> \$ 85,349.31	:
<b>Benefits, etc.:</b> \$ 25,604.79	:
<b>Estimated Cost:</b> <b>\$ 110,954.10</b>	:

**Description of current circumstances that drive this request:**

The current staffing of the Jones Pumping Plant Control Operations Department is four Control Operators, one Relief Control Operator, one Apprentice Control Operator and the Operation's Supervisor. This staffing level provides 24-7 coverage. This coverage includes two operators per shift during normal working hours and one operator per shift for the night shift and all shifts on the weekends. There is one relief operator that normally is on day shift, but covers for employees for leave or training. There is also one Apprentice Operator that will complete his training in 2022. Of this staff, two are nearing retirement. This new position will eventually result in two operators per shift at all times.

Having one person for the overnight shift has been the practice for more than 20 years. However, responsibilities of the operators have changed within the last 20 years and an additional Operator is needed to reduce the risk of damage to the facility. During this time, the Water Authority has added the remote operations of the Intertie Pumping Plant (DCI) and the Delta-Mendota Canal (DMC). Operations of the DMC includes additional daily record keeping and report submittals. In addition, the Jones Pumping Plant (JPP) pumping operations have changed significantly over the years due to environmental regulations and drought related pumping restrictions. This has resulted in more unit stops and starts and increased coordination and communication with the Central Valley Operations Office (CVO). Operators continue to remain responsible for writing and issuing all clearances. Operators are critical to the safe operations of the facility, and stretching them too thin introduces multiple risks to both personnel and equipment.

Outside of normal working hours, the operator is required to tour the JPP at least twice per shift and the operator visits the DCI once per day during the work week when two operators are on duty. During the weekends, the DCI is not visited. If an issue was to occur while the operator was away from the control desk, there is a delay addressing the issue. The current SOP requires two operators to write and issue a clearance. As a result, if a unit trips or other issues occur after normal hours or on a weekend, and a clearance is required to troubleshoot the event, a second operator is called out on overtime to assist with the clearance protocol. Due to the addition of more facilities and responsibilities, the risk of a failure occurring unnoticed by the operator has increased.

Another circumstance that drives this request is the O'Neill Plant has been using the maintenance staff to operate the equipment, which, in turn, pulls them away from the routine maintenance of the plant. With two operators on shift, the OPP maintenance staff would not need to assist with operating the equipment.

Lastly, in 2015, Reclamation's Comprehensive Security Review team documented concerns because the Operators are away from the control center for extended periods while performing security and system

checks. Alarms and warnings for the system are not audible. Recommendation No. TRA-CSR14-03 was issued to create and implement a reporting/monitoring system for these employees/operators. Having two Control Operator's on shift will satisfactorily address this recommendation.

**Description of how this request would change current circumstances:**

This position would be a step towards adjusting the control operator staffing to two people per shift. This will likely take 1-2 years to implement because apprentices cannot work by themselves until they have successfully completed the program.

The Authority has experienced difficulty recruiting journeyman level Control Operators, but has had excellent experience selecting existing employees and sending them to DWR apprentice training program to develop well qualified Operators specific to our facilities. Hiring an Apprentice Control Operator in FY 2023 will allow that Apprentice sufficient time to complete the apprenticeship program (three years) and gain valuable knowledge from the current Control Operations staff. After this apprentice completes the 3-year program and becomes a Journeyman Control Operator, there will be a significant reduction in the amount of overtime hours needed for the Control Operators.

**STAFFING JUSTIFICATION FORM  
FY2023**

**REQUEST DATE:** 10/18/2021  
**PRIORITY CODE:** - -

**EXPENSE CODE:** 5101  
**DEPARTMENT:** 45

**Type of Purchase**

- Materials
- Services
- Other: Request for New Position

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

New Position(s): Plant Mechanic Apprentice at OPP

<b><u>ESTIMATED COST</u></b>	<b><u>CURRENT O&amp;M COST INFORMATION</u></b>
<b>Salary Cost:</b> \$ 71,564.47	:
<b>Benefits, etc.:</b> \$ 21,469.34	:
<b>Estimated Cost:</b> \$ <b>93,033.81</b>	:

**Description of current circumstances that drive this request:**

Currently, there are six mechanics staffed at Jones Pumping Plant (JPP), and two mechanics at the O'Neill Pumping Plant (OPP). One additional mechanic is needed at OPP to support the ongoing preventive maintenance (PM) activities and upcoming EO&M projects. This new position is also timed to allow the apprentice the opportunity to work alongside the current senior mechanic, to gain knowledge from his 20+ years of experience at the plant, prior to his retirement. The Authority proposes to fill the position by promoting within and enrollment in the Department of Water Resources Apprenticeship Program.

The Labor Analysis, performed in 2018, evaluated both the routine/PM work necessary at the OPP, as well as the support needed for the EO&M projects proposed on the SLDMWA 10-Year Plan. This analysis indicated that the crew was sufficiently staffed for routine repairs and PM work, but did not have the required staff needed to support additional EO&M projects, unless significant support was provided by both the Canal Maintenance (CM) & JPP Machine Shop crews. This analysis was supported with the completion of the mechanical rehabilitation for three of the six pumps at OPP over the last five years. In order to complete the work on these three pumps, significant mechanical support was provided by both maintenance workers from the CM Department and plant mechanics from the JPP Machine Shop.

Due to the amount of in-house labor that was required for this multi-year EO&M project, as well as the amount of support needed from the other departments, the backlog of preventive maintenance (PM) work increased at each of the impacted facilities (OPP, JPP & DMC). Filling this position will allow the OPP to be self-sufficient with their O&M activities and foster a greater sense of responsibility to the plant by mechanics dedicated to a plant. The need to pull resources for mechanical support from other departments will be greatly reduced, or no longer necessary.

Based on the upcoming projects, there is an immediate need for an additional Plant Mechanic.

**Description of how this request would change current circumstances:**

Staffing of Mechanics at OPP will increase from 2 to 3. Hiring an Apprentice Plant Mechanic in FY 2023 will afford the apprentice almost two years of educational experience before the first rehabilitation occurs. This will ensure the crew can support the project with as minimal impact to normal operations as possible.





**San Luis & Delta-Mendota Water Authority  
Illustrative SLDMWA O&M Only - WY22 O&M Rates**

(Excludes PUE, SLJU, & Intertie DWR Conveyance)

FAC 11.1.21

	<u>WY 2022 Rate</u> 3/1/22-2/28/23  <u>Illustrative</u> <b>WY2022</b>	<u>WY 2021 Rate</u> 3/1/21-2/28/22  <u>Current</u> <b>WY2021</b>	<b>Variance</b>
<b>WATER SUPPLY</b>			
Irrigation	0%	0%	0%
M&I	50%	50%	0%
Refuge	75%	75%	0%
Exchange/Water Rights	75%	75%	0%
<b>RATES</b>			
Upper DMC	\$15.16	\$12.65	\$2.51
Upper DMC - Exchange/Wtr Rts	\$14.03	\$11.59	\$2.44
Lower DMC/Pool	\$19.02	\$16.72	\$2.30
Lower DMC/Pool - Exchange/Wtr Rts	\$17.89	\$15.66	\$2.23
San Felipe	\$22.09	\$17.25	\$4.84
SLC Above Dos Amigos	\$22.08	\$17.24	\$4.84
SLC Below Dos Amigos	\$22.07	\$17.23	\$4.84
San Luis Drain	\$0.90	\$0.80	\$0.10

January 5, 2006

To: Board of Directors  
From: Frances Mizuno  
Subject: Index for Annual Salary Adjustments

### Background

In 2004, the Board of Directors changed the Authority's Salary Policy such that salary surveys would only be conducted every three years and in the in-between years salary adjustments would be based on the Consumer Price Index (CPI) for Pacific Cities (West of less than 1,500,000 Population). In addition, for consistency the use of September CPI of any given year is to be used as the basis for salary adjustments. September CPI was selected because that is the latest CPI data available when the budget goes through Finance Committee review in October.

Staff used the September, 2005 CPI of 4.1% as a placeholder in the proposed FY 2007 budget. The 4.1% CPI for September was a manifestation of the Katrina disaster and therefore was much higher than the previous months index and higher than the October and November indexes that followed. During the Finance Committee review of the proposed budget, the issue was raised regarding the volatility of using one month as the index and the committee members expressed the desire to use an index closer to the fiscal year in which the salary adjustment was to be applied. Staff expressed the desire for consistency from one year to the next. The Finance Committee directed staff to review this issue and make a recommendation to the Board prior to the approval of the FY 2007 budget.

### Recommendation

In making a recommendation, staff took into consideration the following key factors to determine the appropriate index for salary adjustments:

1. Finance Committee's desire to use the latest possible index as close to the applicable fiscal year.
2. Consistency. Need to have the same policy every year.
3. Volatility. A single month may not be reflective of the time frame.
4. Administratively/logistically practical.
5. Data used will allow for approval of budget in January. Member agencies need to have Authority's rates to prepare for individual district budgets.

Based on these factors, it is recommended that the Authority establish a policy that will use a four month average index of August-November of any given year as the index used as the basis for salary adjustments. December data is not available until mid-January. In using the four months of August-November data, it takes out the volatility, uses the latest

four months of available data closest to the applicable fiscal year and allows for approval of the budget in January. In addition, using the latest four months also provides for a better indicator as to what may happen in the next year. Given that this policy is established and applied, then the factor of consistency is also met.

As far as meeting the administrative/logistically practical factor, it is recommended that during the budget review process during the months of October and until the budget is approved in January, the average of the August and September CPI is to be used as a placeholder in the proposed budget. This placeholder will be in place for the Finance Committee review, the initial Board submittal in December and the 30-day review by water users. Then when the proposed budget that is presented to the Board for approval in January the budget will be adjusted to reflect the four month August-November index as the proposed salary adjustment.



# San Luis & Delta-Mendota Water Authority

## Regular Operation & Maintenance And Extraordinary O&M & Capital Improvement Proposed Budgets

Fiscal Year  
2023



**TO:            OPERATIONS & MAINTENANCE TECHNICAL COMMITTEE**

**Chris White, Chairman  
Bobby Pierce  
Jeff Bryant  
Juan Cadena  
Nader Noori**

**Gary Nagaoka  
Bill Pierce  
Chris Hickernell  
Danny Wade  
Designated Alternates**

**FROM:        Steve Larsen, Operations & Maintenance Manager**

**DATE:        October 18, 2021**

**SUBJECT: Approval of Proposed Fiscal Year 2023 Operations & Maintenance Budget**

This memo provides a summary of the major changes between the proposed FY23 and the FY22 Total O&M Budgets.

The proposed FY23 total O&M Budget is \$28,543,128 compared to the FY22 budget of \$28,451,353 for an overall increase of 0.32%. The total proposed self-funded portion paid by the water users is \$28,470,317 which is an increase of 0.32% from the FY22 budget. The RO&M portion of the budget increased by 11.77%. The EO&M portion of the budget increased by 39.12% and the Capital Improvement Projects (CIP-USBR Funded) decreased by 48.6%.

Relative to salary placeholders, in 2006 the Authority established a policy (attached) of using a four-month average CPI of August-November of any given year as the index used as the basis for salary adjustments. Given the October review by the O&M Technical Committee, the same policy directs that the average of August and September CPI be used as a placeholder in the initial proposed budget. The CPI for September 2021 will be released October 14, 2021, but the average of the August 2021 CPI (6.2) and July 2021 CPI (6.7) is 6.45. That said, staff has included a preliminary 3% increase placeholder, given the significant increase in CPI compared to last year and expectation that the large monthly increases may be temporary. Staff expects to discuss the salary placeholder with the O&M Technical Committee in the upcoming meeting, and notes that the salary placeholder is subject to change.

New positions proposed for FY23 are added to address impending retirements.

- 1) Apprentice Operator – see justification (page 18)
- 2) Apprentice Plant Mechanic – see justification (page 19)

**Adjusted Routine O&M (RO&M) Budget increase of 12.72% or \$1,796.1K**

**Parts, Materials and Services (\$348.1K increase)**

- Small tools increased \$12.8K (34.33%)
  - Replacement defibrillators and CPR training equipment
- Clothing, Personal Protective Equipment (PPE) increased \$12.2K (33.93%)
  - Requirement for arc-flash rated clothing
  - Safety boot allowance raised to \$200/year
- Legal decreased \$53K (-27.60%)
  - Adjusted to match current projects
- Other Professional Services increased \$11.9K (5.13%)
  - Adjusted to match current projects
- Other Services & Expenses increased \$138K (44.81%)
  - NetSuite CMMS Program
- Computer Software increased \$5.7K (13.67%)
  - Additional AutoCAD license
  - software for PLC (Programmable Logic controller)
- Professional organization dues decreased 0.7K (-11.61%)
  - More closely match actual
- Conference & Training Costs increased \$38.7K (36.32%)
  - Training for Electrical Safety, Arc Flash
  - OSHA Crane operator, inspections, testing
  - Technical training for protective relays
- Employee and Group meetings \$1.9K (7.66%)
  - More closely match actual.
- Petroleum, oil and lubricants increased \$16.5K (6.95%)
  - Estimating fuel costs to be \$3.50 per gallon for both unleaded gas and diesel.
- Outside Services – Vehicles/Construction Equipment increased \$5.5K (8.26%)
  - Match actual expenditures.
- Rents/Leases – Vehicles/Construction Equipment increased \$3.5K (7.0%)
  - Water truck rental during earth work; increased requirements due to Air Resources Board

- Parts and Materials decreased by a total of \$58.5K (-9.63%)
  - There was a net reduction in Special Projects of \$107.6K
  - The routine parts and materials were increased by \$49.1K to account for inflation and shipping cost increases
- Outside Services – Facilities and plant equipment increased \$180.6K (82.62%)
  - There was a net increase in Special Projects of \$165K
  - The remaining increase is based on adding HVAC services at OPP
- Pipe, metal, and Treatments – increased \$13K (36.31%)
  - Anticipated price increases, based on current pricing for ferrous and non-ferrous metals
- Sand, Backfill & Rock increased \$1.5K (11.11%)
  - Match actual expenditures
- Concrete and Paving Materials increased \$5K (20.0%)
  - Match actual expenditures
- Chemicals increased \$9.5K (7.11%)
  - Based on same usage as prior year with a 7% estimated price increase
- Network Communications decreased \$7K (-8.24%)
  - Match actual expenditures
- Hazardous Waste Disposal increased \$3.5K (14.1%)
  - Match actual expenditures; tires
- Special Projects, Equipment and Services (see justifications) increased \$57.4K
  - OPP replacement plant equipment (Vacuum pump, cooling water strainers, sand filter control valves, and servo motor piston rings)
  - JPP replacement plant equipment (shaft sleeve and breaker upgrades)
  - DCI replacement plant equipment (relay replacement and anode replacement)
  - Electrical Test equipment (see justification) necessary to maintenance and testing; boroscope, Infra-Red scope, Oscilloscope, Power meter)
  - Replacement machine shop equipment (see justification); vertical mill (Bridgeport) and Iron Worker, 50-ton hydraulic type
  - Engineering test equipment replacement (see justification); Ultrasonic thickness tester

#### **Insurance Premiums and Fees**

- Increase of \$14K (5.82%)

#### **Equipment/Capital Asset Purchases**

- Net decrease from FY22 of \$13.35K, see justifications (-6.76%)

**SAN LUIS & DELTA-MENDOTA WATER AUTHORITY**

**FY2022 APPROVED, PROPOSED FY2023 TOTAL BUDGET SUMMARY**

<b>O&amp;M Budget Summary</b>	<b>Approved FY22 Budget</b>	<b>Proposed FY23 Budget</b> 10.18.21 OMTC	<b>% Change FY22 - FY23</b>
<u>Routine O&amp;M (Water Users)</u>	\$ 15,031,622	\$ 16,809,017	11.82%
<u>USBR Funded O&amp;M (Service Contract)</u>	\$ 72,781	\$ 72,811	0.04%
<b><u>TOTAL (Water Users &amp; USBR)</u></b>	<b><u>\$ 15,104,403</u></b>	<b><u>\$ 16,881,828</u></b>	<b><u>11.77%</u></b>
<u>Extraordinary O&amp;M (Water Users)</u>	\$ 5,472,950	\$ 7,614,100	39.12%
<u>Capital Improvements Projects</u>	\$ 7,874,000	\$ 4,047,200	-48.60%
<b><u>TOTAL (EO&amp;M/CIP)</u></b>	<b><u>\$ 13,346,950</u></b>	<b><u>\$ 11,661,300</u></b>	<b><u>-12.63%</u></b>
<b><u>TOTAL</u></b> (includes Service Contract)	<b><u>\$ 28,451,353</u></b>	<b><u>\$ 28,543,128</u></b>	<b><u>0.32%</u></b>
<b><u>Total Self Funded Budget</u></b> (Water Users, excludes Service Contract)	<b><u>\$ 28,378,572</u></b>	<b><u>\$ 28,470,317</u></b>	<b><u>0.32%</u></b>



## Routine O&M Budget

Staffing Levels

Materials Evaluation

Vehicle and Equipment

Acquisition

## 1. Staffing

### Summary of Assumptions and Considerations

#### A. Proposed O&M positions budgeted fully or partially for FY23:

<u>Position</u>	<u>Number in FY23</u>
Accountant II	2
Accountant III	1
Accounting Technician I	2
Accounting Technician III	1
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	2
Civil Maintenance Planner	1
Civil Maintenance Superintendent	1
Civil Maintenance Worker	11
Contract Specialist	1
Control Operator (includes 2 apprentices)	6*
Control Operator, Relief	1
Custodian	2
Director of Finance	1
Director of HR & Administration	1
Electrical Engineer, Assistant	1
Electrical Project Specialist	1
Electric Shop Foreman	1
Electrician (includes 2 apprentices)	7
Engineering & Planning Manager	1
Sr Engineering Technician	1
Equipment Mechanic	2
Executive Director	1
Executive Secretary	1
Facilities O&M Director	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
Hydro-Tech III	1
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 FY23</u>
Operations Supervisor	1
Painter	1
Plant Engineer	1
Plant Foreman, O'Neill	1
Plant Foreman, Machine Shop	1
Plant Mechanic II (includes 2 apprentices)	9*
Project Coordinator	1
Safety Officer	1
SCADA Engineer	1
SCADA Technician	1
Secretary	1
Special Programs Administrator	1
Special Programs Manager	1
Water Accounting Supervisor	1
Water Operations Superintendent	1
Weed Control Specialist	1
Work and Asset Manager	1
Work Planning Technician	1
<u>Total Positions</u>	<u>105</u>

New positions denoted with an asterisk (\*), see justifications on pages (18 and 19)

- 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.

**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.

January 5, 2006

To: Board of Directors  
From: Frances Mizuno  
Subject: Index for Annual Salary Adjustments

### Background

In 2004, the Board of Directors changed the Authority's Salary Policy such that salary surveys would only be conducted every three years and in the in-between years salary adjustments would be based on the Consumer Price Index (CPI) for Pacific Cities (West of less than 1,500,000 Population). In addition, for consistency the use of September CPI of any given year is to be used as the basis for salary adjustments. September CPI was selected because that is the latest CPI data available when the budget goes through Finance Committee review in October.

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### Recommendation

In making a recommendation, staff took into consideration the following key factors to determine the appropriate index for salary adjustments:

1. Finance Committee's desire to use the latest possible index as close to the applicable fiscal year.
2. Consistency. Need to have the same policy every year.
3. Volatility. A single month may not be reflective of the time frame.
4. Administratively/logistically practical.
5. Data used will allow for approval of budget in January. Member agencies need to have Authority's rates to prepare for individual district budgets.

Based on these factors, it is recommended that the Authority establish a policy that will use a four month average index of August-November of any given year as the index used as the basis for salary adjustments. December data is not available until mid-January. In using the four months of August-November data, it takes out the volatility, uses the latest

four months of available data closest to the applicable fiscal year and allows for approval of the budget in January. In addition, using the latest four months also provides for a better indicator as to what may happen in the next year. Given that this policy is established and applied, then the factor of consistency is also met.

As far as meeting the administrative/logistically practical factor, it is recommended that during the budget review process during the months of October and until the budget is approved in January, the average of the August and September CPI is to be used as a placeholder in the proposed budget. This placeholder will be in place for the Finance Committee review, the initial Board submittal in December and the 30-day review by water users. Then when the proposed budget that is presented to the Board for approval in January the budget will be adjusted to reflect the four month August-November index as the proposed salary adjustment.

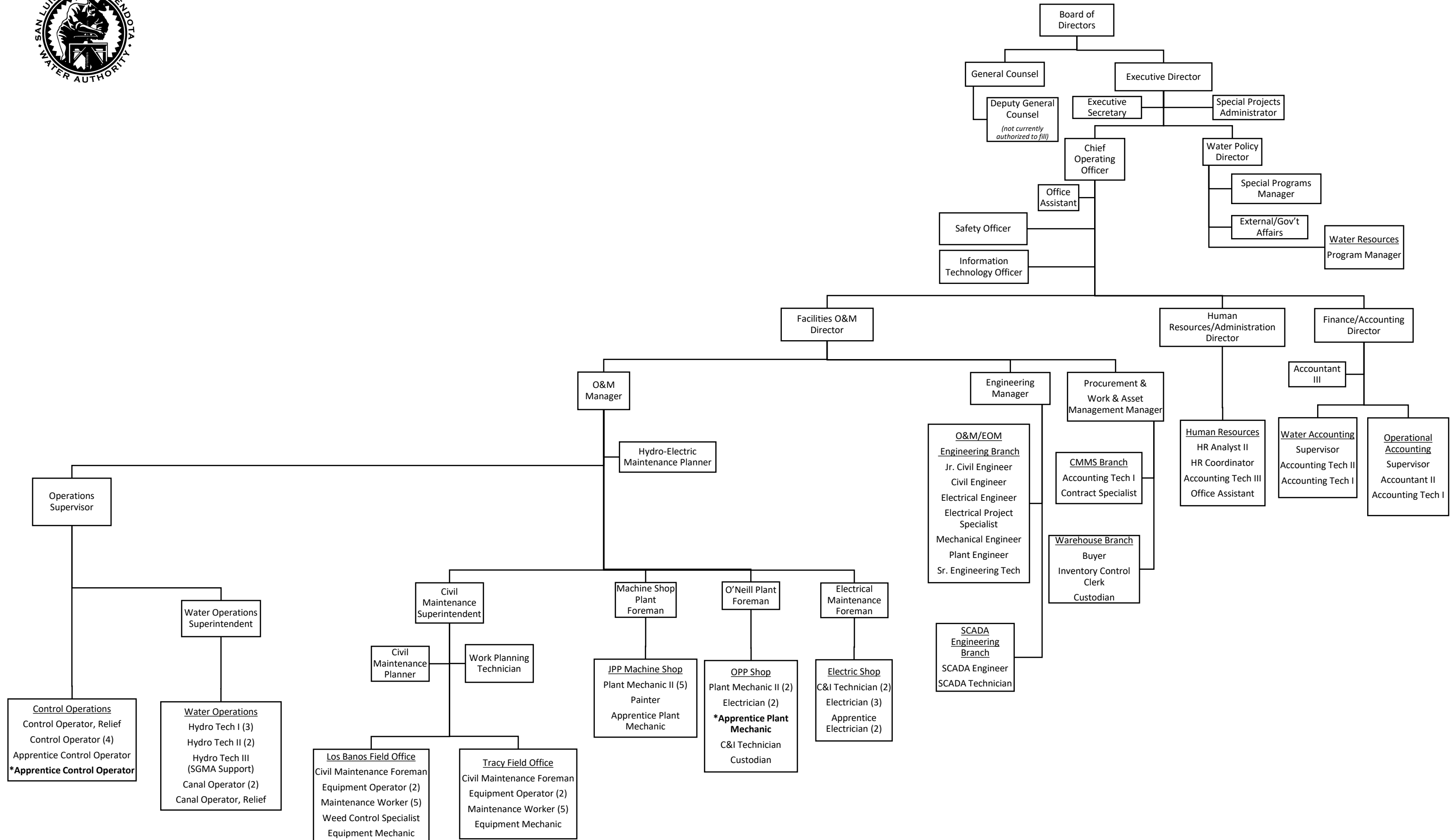
## Routine O&M Budget

Staffing Levels

Materials Evaluation

Vehicle and Equipment

Acquisition



\*New Proposed positions

# Routine O&M Budget

FY23 Proposed Budget

Summary &

Line Item Details



COLUMN	B		C	C vs B	COMMENTS - 2023
	2022	2023			
	APPROVED BUDGET	PROPOSED BUDGET			
<b>SLDMWA ANNUAL BUDGET ROUTINE O&amp;M BUDGET FY23 SELF-FUNDED &amp; USBR - FUNDED O&amp;M ONLY</b>					<b>A comment is necessary for any variance greater than 5%, except all payroll related changes.</b>
<b>SUMMARY (no EO&amp;M &amp; CIP) Proposed Budget</b>		<b>FY22</b>	<b>FY23</b>		
5101	Salaries	7,684,581	8,355,136	8.73%	
5102	Overtime	297,450	318,400	7.04%	
5103	Salary Adjustments	1,425,750	1,671,027	17.20%	
5108	Sick Cash Out Expense	20,000	20,000	0.00%	
5141	Health Insurance - SLDMWA Contr	1,894,737	2,386,617	25.96%	
<b>Subtotal Salaries &amp; Employee Benefits</b>		<b>11,322,518</b>	<b>12,751,180</b>	<b>12.62%</b>	
5210	Office Services & Supplies	64,050	64,650	0.94%	
5211	Mailing Costs	6,700	6,800	1.49%	
5216	Small Tools	37,300	50,100	34.32%	Increase due to Replacement of AED devices, CPR/First Aid Kits & cost of replacement tools
5221	Clothing, Personal Equip/Laundry Srvc	36,100	48,350	33.93%	Increase due to PPE replacement clothing and boots
5226	Janitorial Supplies & Services	13,650	13,900	1.83%	
5227	Engineering Consultant	155,000	154,500	-0.32%	
5228	Auditing	41,000	42,000	2.44%	
5229	Legal	192,000	139,000	-27.60%	Decreased to better match actual expenses
5231	Other Professional Services	231,900	243,800	5.13%	Increase to better match actual expenses (GP Support, Netw Consultant & Comp tech support cost increases)
5236	Security Services/Systems	0	0	0.00%	
5237	Fees & Licenses	19,335	19,870	2.77%	
5241	Other Services & Expenses	307,880	445,840	44.81%	Increase due to NetSuite & telephone tech support & Recruitment services
5243	Computer Software	41,700	47,400	13.67%	Increase due to additional AutoCAD & PLC application licenses
5245	Contract Labor	0	0	0.00%	
5246	Rents/Leases - Ofc. Machinery & Equipment	2,940	2,940	0.00%	
5247	Organizational Membership Dues	25,000	25,000	0.00%	
5251	Professional Organization Dues	6,030	5,330	-11.61%	Decreased to better match actual expenses
5256	Conference & Training Costs	106,450	145,115	36.32%	Increase due to OSHA Req'd training and craft technical training due to reduced knowledge base associated with recent retirements
5261	Travel	96,600	95,600	-1.04%	
5271	Employee & Group Meetings	24,940	26,850	7.66%	Increased to better match actual expenses
5286	Parts/Materials - Vehicle/Constrct Equip	80,000	80,000	0.00%	
5288	Petroleum, Oil & Lubricants	237,450	253,950	6.95%	Budget based on \$3.50/gal unleaded & \$3.50/gal diesel
5291	Outside Services - Vehicle/Constrct Equip	66,550	72,050	8.26%	Increased to better match actual expenses
5296	Rents/Leases - Vehicle/Constrct Equip	50,000	53,500	7.00%	Increased to better match actual expenses
5301	Parts & Materials - Bldg/Grnds/Mach/Equip	607,200	548,700	-9.63%	Decrease related to Special Projects (See justifications in packet)
5311	Outside Services - Bldg/Grnds/Mach/Equip	218,600	399,200	82.62%	Increase related to Special Projects (See justifications in packet)
5316	Rents/Leases - Land & Buildings	135,000	137,160	1.60%	
5331	Pipe, Metal & Treatments	35,800	48,800	36.31%	Increase due to cost of materials
5341	Sand, Backfill & Rock	13,500	15,000	11.11%	Increase due to cost of materials
5351	Concrete & Paving Material	25,000	30,000	20.00%	Increase due to cost of materials
5361	Chemicals	133,800	143,313	7.11%	Anticipated price increase
5372	Telephone Expenses	109,470	113,910	4.06%	
5373	Energy	76,600	76,600	0.00%	
5374	Radio Communications	0	0	0.00%	
5375	Network Communications	85,000	78,000	-8.24%	Decreased to better match actual expenses (78K Wide Area Network & 3K OPP SCADA)
5376	Hazardous Waste Disposal	24,800	28,300	14.11%	Increased to better match actual expenses
5377	Disposal Expense	37,400	37,380	-0.05%	
<b>Subtotal Services &amp; Supplies</b>		<b>3,344,745</b>	<b>3,692,908</b>	<b>10.41%</b>	
5401	Insurance Premiums & Fees	239,600	253,550	5.82%	Anticipated cost increase
<b>Subtotal Other Charges</b>		<b>239,600</b>	<b>253,550</b>	<b>5.82%</b>	
5521	New/Replacement Equipment & Furniture	159,540	155,190	-2.73%	
5523	Computer Hardware	20,000	19,000	-5.00%	Decreased to better match actual expenses
5526	Water Meters	18,000	10,000	-44.44%	Reduced expenses due to EO&M Flowmeter Upgrade project
5541	Automotive & Light Trucks	0	0	0.00%	
5544	Heavy Equipment	0	0	0.00%	
5561	Construction Equipment/Payment	0	0	0.00%	
<b>Subtotal Capital Assets</b>		<b>197,540</b>	<b>184,190</b>	<b>-6.76%</b>	
<b>TOTAL ROUTINE O&amp;M BUDGET</b>		<b>15,104,403</b>	<b>16,881,828</b>	<b>11.77%</b>	



RO&M BUDGET FY 2023 LINE ITEM DETAIL

	100.00%														A		B	
Revised: 10.8.21	11,823,963.46	0.86%	0.31%	12.40%	0.08%	0.92%	0.00%	1.19%	1.19%	0.99%	2.93%	8.37%	12.47%	87.49%				
SLDMWA ANNUAL BUDGET SUMMARY DETAIL OF ALL DEPTS Proposed Final - BOD xx.xx.xx R, O & M	Total including EO&M PAT GRANTS, & USBR	12 DCI	13 Volta Wells Pumping	19 ONP	30 Maint TFF	41 SLD	44 O&M Delta X-Chnl	50 Safety	51 IT	52 Warehousing	54 TFO Exp.	56 Direct O&M	58 O&M LBAO Admin	FY23 TOTAL DMC	FY22 TOTAL DMC	% Change FY23 vs FY22 DMC (A - B)/B		
5101 - Salaries	9,834,536.21	80,935.75	28,983.46	1,159,948.72	7,132.65	88,772.38	0.00	117,250.28	117,058.60	96,202.11	278,321.28	819,560.03	1,211,024.16	8,355,136.21	7,684,580.90	8.73%		
5102 - Overtime	318,400.00	4,360.00	1,598.00	73,675.30	1,388.00	2,730.00	0.00	0.00	0.00	1,334.30	12,387.00	6,294.70	20,765.70	318,400.00	297,450.00	7.04%		
5103 - Salary Related Benefits	1,671,027.24	16,187.15	5,796.69	231,989.74	1,426.53	17,754.48	0.00	23,450.06	23,411.72	19,240.42	55,664.26	163,912.01	242,204.83	1,671,027.24	1,425,749.78	17.20%		
5108 - Sick Cash Out Expense	20,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20,000.00	20,000.00	0.00%		
5141 - Health Insurance	2,386,616.52	23,768.70	8,766.82	308,922.38	2,372.62	29,837.39	0.00	0.00	0.00	33,766.30	78,121.19	194,224.21	333,533.26	2,386,616.52	1,894,737.32	25.96%		
<b>Total Salary Related</b>	<b>14,230,579.97</b>	<b>125,251.61</b>	<b>45,144.96</b>	<b>1,774,536.15</b>	<b>12,319.80</b>	<b>139,094.25</b>	<b>0.00</b>	<b>140,700.33</b>	<b>140,470.32</b>	<b>150,543.12</b>	<b>424,493.72</b>	<b>1,183,990.95</b>	<b>1,827,527.95</b>	<b>12,751,179.97</b>	<b>11,322,518.00</b>	<b>12.62%</b>		
5210 - Office Svcs & Supp.	64,650.00	0.00	0.00	750.00	0.00	0.00	0.00	2,000.00	200.00	2,800.00	0.00	14,100.00	35,800.00	64,650.00	64,050.00	0.94%		
5211 - Mailing Costs	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	600.00	5,600.00	6,800.00	6,700.00	1.49%		
5216 - Small Tools	50,100.00	0.00	0.00	11,300.00	0.00	0.00	0.00	11,000.00	500.00	600.00	0.00	300.00	0.00	50,100.00	37,300.00	34.32%		
5221 - Clothing, Pers Equip.	48,350.00	0.00	0.00	8,600.00	0.00	0.00	0.00	0.00	100.00	1,000.00	0.00	1,000.00	300.00	48,350.00	36,100.00	33.93%		
5226 - Janitorial Svcs & Supplies	13,900.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	200.00	7,100.00	0.00	2,000.00	13,900.00	13,650.00	1.83%		
5227 - Engineering Consult.	554,500.00	1,500.00	0.00	83,000.00	0.00	0.00	0.00	0.00	0.00	0.00	10,000.00	0.00	0.00	554,500.00	555,000.00	-0.32%		
5228 - Auditing	42,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42,000.00	42,000.00	0.00%			
5229 - Legal	144,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63,000.00	8,000.00	139,000.00	192,000.00	-27.60%		
5231 - Other Professional Svcs.	3,678,800.00	0.00	0.00	0.00	0.00	1,000.00	0.00	7,500.00	111,800.00	0.00	1,000.00	20,000.00	35,500.00	243,800.00	231,900.00	5.13%		
5237 - Fees & Licenses	19,870.00	0.00	0.00	1,000.00	0.00	0.00	0.00	600.00	0.00	0.00	1,000.00	1,220.00	450.00	19,870.00	19,335.00	2.77%		
5241 - Other Services & Expenses	450,840.00	4,000.00	0.00	19,400.00	0.00	0.00	0.00	0.00	245,200.00	1,950.00	18,400.00	10,000.00	121,390.00	445,840.00	307,880.00	44.81%		
5243 - Computer Software & Parts < \$1000. Each	47,400.00	0.00	0.00	0.00	0.00	0.00	0.00	750.00	46,650.00	0.00	0.00	0.00	0.00	47,400.00	41,700.00	13.67%		
5245 - Contract Labor	450,000.00	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%		
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	2,940.00	2,940.00	2,940.00	0.00%		
5247 - Organizational Membership	25,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25,000.00	25,000.00	25,000.00	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	500.00	3,830.00	5,330.00	6,030.00	-11.61%		
5256 - Conference/ Training	145,115.00	0.00	0.00	9,500.00	0.00	0.00	0.00	37,400.00	3,700.00	300.00	1,500.00	16,215.00	23,500.00	145,115.00	106,450.00	36.32%		
5261 - Travel	101,100.00	0.00	0.00	14,000.00	0.00	0.00	0.00	2,000.00	1,500.00	400.00	500.00	7,200.00	16,000.00	95,600.00	96,600.00	-1.04%		
5271 - Employee & Group Mtgs.	26,850.00	0.00	0.00	850.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	2,900.00	18,400.00	26,850.00	24,940.00	7.66%		
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	80,000.00	80,000.00	0.00%		
5288 - Petroleum, Oil & Lubricants	253,950.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5,000.00	2,500.00	253,950.00	237,450.00	6.95%		
5291 - Outside Services - Vehicles & Constr. Equip	72,050.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,000.00	4,050.00	72,050.00	66,550.00	8.26%		
5296 - Rents/Leases - Vehicle & Construction Equipment	59,100.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	53,500.00	50,000.00	7.00%		
5301 - Parts/Material-Bldg, Grounds, Mach. & Equip.	732,100.00	37,600.00	6,000.00	122,650.00	9,500.00	2,000.00	0.00	4,000.00	0.00	1,000.00	47,000.00	0.00	1,600.00	548,700.00	607,200.00	-9.63%		
5311 - Outside Serv.-Bldg, Grounds, Mach. & Equip.	5,564,700.00	55,000.00	0.00	82,200.00	6,500.00	0.00	38,000.00	0.00	0.00	12,000.00	11,000.00	0.00	0.00	399,200.00	218,600.00	82.62%		
5316 - Rents/Leases - Land & Bldg.	137,160.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	137,160.00	137,160.00	135,000.00	1.60%		
5331 - Pipe, Metal & Treatments	48,800.00	1,800.00	0.00	9,000.00	0.00	1,000.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	48,800.00	35,800.00	36.31%		
5341 - Sand, Backfill and Rock	15,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15,000.00	13,500.00	11.11%		
5351 - Concrete & Paving Mat.	30,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30,000.00	25,000.00	20.00%		
5361 - Chemicals	143,313.00	1,900.00	0.00	2,100.00	0.00	12,000.00	0.00	0.00	0.00	0.00	1,000.00	0.00	0.00	143,313.00	133,800.00	7.11%		
5372 - Telephone Expenses	113,910.00	0.00	0.00	3,000.00	0.00	0.00	0.00	2,480.00	45,380.00	0.00	800.00	10,560.00	17,690.00	113,910.00	109,470.00	4.06%		
5373 - Energy	76,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10,600.00	76,600.00	76,600.00	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%		
5375 - Computer Comm.	78,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	78,000.00	0.00	0.00	0.00	0.00	78,000.00	85,000.00	-8.24%		
5376 - Hazardous Waste Disposal	28,300.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	3,000.00	0.00	0.00	0.00	28,300.00	24,800.00	14.11%		
5377 - Disposal Expenses	37,380.00	0.00	0.00	2,500.00	0.00	500.00	0.00	0.00	0.00	3,200.00	0.00	0.00	2,180.00	37,380.00	37,400.00	-0.05%		
5401 - Insurance Premiums and Fees	253,550.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5,600.00	247,950.00	253,550.00	239,600.00	5.82%		
5521 - New/Replacement Equip. & Furniture	155,190.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	2,000.00	7,000.00	8,500.00	67,090.00	155,190.00	159,540.00	-2.73%		
5523 - Computer Hardware	168,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19,000.00	0.00	0.00	0.00	0.00	19,000.00	20,000.00	-5.00%		
5526 - Water Meters	10,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10,000.00	18,000.00	-44.44%		
5541 - Vehicles & Constr. Equip	128,400.00	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	0.00%		
5544 - Heavy Equipment	249,300.00	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%		
<b>Total All Other Expenses</b>	<b>14,312,548.00</b>	<b>101,800.00</b>	<b>6,000.00</b>	<b>378,650.00</b>	<b>16,000.00</b>	<b>16,500.00</b>	<b>38,000.00</b>	<b>68,730.00</b>	<b>552,030.00</b>	<b>28,550.00</b>	<b>106,300.00</b>	<b>167,695.00</b>	<b>831,530.00</b>	<b>4,130,648.00</b>	<b>3,781,885.00</b>	<b>9.22%</b>		
<b>Grand Total</b>	<b>28,543,127.97</b>	<b>227,051.61</b>	<b>51,144.96</b>	<b>2,153,186.15</b>	<b>28,319.80</b>	<b>155,594.25</b>	<b>38,000.00</b>	<b>209,430.33</b>	<b>692,500.32</b>	<b>179,093.12</b>	<b>530,793.72</b>	<b>1,351,685.95</b>	<b>2,659,057.95</b>	<b>16,881,827.97</b>	<b>15,104,403.00</b>	<b>11.77%</b>		

# Routine O&M Budget

FY23 Proposed

Staffing Justifications

**STAFFING JUSTIFICATION FORM  
FY 2023**

**REQUEST DATE:** 10/11/21  
**PRIORITY CODE:** - -

**EXPENSE CODE:** 5101  
**DEPARTMENT:** 41

**Type of Purchase**

- Materials
- Services
- Other: Request for New Positions

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

New Position: Apprentice Control Operator

<b><u>ESTIMATED COST</u></b>	<b><u>CURRENT O&amp;M COST INFORMATION</u></b>
<b>Salary Cost:</b> \$ 85,349.31	:
<b>Benefits, etc.:</b> \$ 25,604.79	:
<b>Estimated Cost:</b> <b>\$ 110,954.10</b>	:

**Description of current circumstances that drive this request:**

There are currently three (3) Control Operators that are within 5 years of retirement. Each of these Operators has at least 15-years of experience in the position.

**Description of how this request would change current circumstances:**

The Authority has experienced difficulty recruiting for journeyman level Operators but have had excellent experience with hiring entry level employees and providing the apprentice training program to develop well qualified Operators specific to our facilities. Hiring an Apprentice Control Operator in FY 2023 will allow that Apprentice sufficient time to complete the apprenticeship program (three years) and gain the valuable knowledge from the current Control Operations staff in time for the impending retirement.

**STAFFING JUSTIFICATION FORM  
FY2023**

**EXPENSE CODE:** 5101  
**BUDGET UNIT:** 45

**PRIORITY CODE:** - -

**Type of Purchase**

- Materials
- Services
- Other: Request for New Position

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

New Position(s): Plant Mechanic Apprentice

<b><u>ESTIMATED COST</u></b>	<b><u>CURRENT O&amp;M COST INFORMATION</u></b>
<b>Salary Cost:</b> \$ 71,564.47 <b>Benefits, etc.:</b> \$ 21,469.34 <hr style="width: 50%; margin-left: 0;"/> <b>Estimated Cost:</b> <b>\$ 93,033.81</b>	: : :

**Description of current circumstances that drive this request:**  
The O'Neill crew currently has two (2) Plant Mechanics. One of the plant mechanics has over 25 years with the company and is nearing retirement. This along with the planned pump bowl replacement and pump rehabilitation projects starting in about 2 years, will result in a substantial increase in plant mechanic labor hours to complete.

**Description of how this request would change current circumstances:**  
Hiring an Apprentice Plant Mechanic in FY 2023 will allow that Apprentice sufficient time to complete the apprenticeship program (four years) and gain the valuable knowledge from the staff in time for the impending retirement.

# Routine O&M Budget

FY23 Proposed

Special Projects &

Equipment

Justifications

**SPECIAL PROJECT JUSTIFICATION FORM**

**FY2023**

**REQUEST DATE:** 8/30/2021

**EXPENSE CODE:** 5241

**PRIORITY CODE:** - -

**BUDGET UNIT:** 60

**Type of Purchase**

- Materials
- Services
- Other:

**PROJECT DESCRIPTION:**

Electrical Testing

**GENERAL SPECIFICATIONS:**

**(See attached information)**

<p><b><u>ESTIMATED COST(incl taxes, freight)</u></b></p> <p><b>Purchase Cost:</b> \$5,000</p> <p><b>Inflation Adjustment (4%/YR)</b></p> <hr/> <p><b>Estimated Cost:</b></p> <p align="center"><i>Rounded up to 100's</i></p> <hr/> <p><b>Total Estimated Cost: \$5,000</b></p>	<p align="center"><b><u>Current O&amp;M Cost Information</u></b></p> <p><b>Current cost of annual repairs:</b></p> <p><b>Potential For lost conveyance (if appl)</b></p> <p align="center"><b>Other O&amp;M Cost:</b></p> <p align="center"><b>ANNUAL O&amp;M COST:</b></p>
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**Description of current circumstances that drive this request:** *(include age and condition of existing equipment)*

OPP Unit Condition Assessment 2018 has recommended to perform ramp test for all the units every 3 years to monitor the units until the planned rewind in the future. This funding allows to do 2 units per year.

**Description of how this request would change current circumstances:**

Per FIST 4-1B Section 21.0 Generators and Large Motors, ramp tests were to be performed every 6 years. The recommendation for ramp tests for OPP Units have increased the frequency to every 3 years. The request for Electrical Testing budget would accommodate the required increased testing frequency.

**Other options considered during evaluation:**

No other options were considered.

**Conclusion/Recommendation:**

This budget request is in compliance with the recommendation of the increased testing frequency until the units have been rewound and TSC has advised to revert the testing frequency.

Note: Ramp testing of the JPP Units is required and will begin in FY25, with one unit tested per year.

**Proposed Testing Schedule (ongoing)**

Fiscal Year	JPP Unit	OPP Unit	Estimated Total Cost*
23	N/A	1,2	\$5,000
24	N/A	5,6	\$5,000
25	6	3,4	\$10,000
26	2	1,2	\$10,000
27	5	5,6	\$10,000
28	1	3,4	\$10,000
29	4	1,2	\$10,000
30	3	5,6	\$10,000

\*Cost will be evaluated at each budget cycle and adjusted accordingly.



**SPECIAL PROJECT JUSTIFICATION FORM**

**FY2023**

**REQUEST DATE:** 8/30/2021

**EXPENSE CODE:** 5301

**PRIORITY CODE:** - -

**BUDGET UNIT:** 60

**Type of Purchase**

- Materials
- Services
- Other:

**PROJECT DESCRIPTION:**

DCI SEL-551, SEL-387A Relays

**GENERAL SPECIFICATIONS:**

**(See attached information)**

<b><u>ESTIMATED COST(incl taxes, freight)</u></b>	<b><u>Current O&amp;M Cost Information</u></b>	<b><u>Cost</u></b>
<b>Purchase Cost:</b> \$20,000 <b>Inflation Adjustment (4%/YR)</b> <b>Estimated Cost:</b>  <i>Rounded up to 100's</i> <b>Total Estimated Cost:</b> <b>\$20,000</b>	<b>Current cost of annual repairs:</b> <b>Potential For lost conveyance (if appl)</b> <b>Other O&amp;M Cost:</b> <b>ANNUAL O&amp;M COST:</b>	

**Description of current circumstances that drive this request:** *(include age and condition of existing equipment)*  
 SEL-551 and SEL-387A relays are overdue for calibration and maintenance. Since there are no test switches installed for the relays, it will require a plant outage at DCI for 2 days to perform calibration and maintenance on the relays. There are also currently no spare relays for DCI, and this purchase would allow the WA to quickly replace a faulty relay preventing an extended outage of DCI.

**Description of how this request would change current circumstances:**  
 Per FIST 4-1B Section 26.0 Relays and Protection Circuits, functional maintenance for microprocessor relays were to be performed every 4 years. In order to perform maintenance on these relays, spare relays will be calibrated and maintained in the shop and swap the relays on a minimal plant outage.

**Other options considered during evaluation:**

No other options were considered.

**Conclusion/Recommendation:**

The purchase of these relays will minimize the outage requests for DCI pumping plant while the calibration and maintenance are performed on the relays.

**SPECIAL PROJECT JUSTIFICATION FORM**

**FY2023**

**REQUEST DATE:** 8/30/2021

**EXPENSE CODE:** 5301

**PRIORITY CODE:** - -

**BUDGET UNIT:** 60

**Type of Purchase**

- Materials
- Services
- Other:

**PROJECT DESCRIPTION:**

JPP Breaker Upgrades

**GENERAL SPECIFICATIONS:**

**(See attached information)**

<b><u>ESTIMATED COST(incl taxes, freight)</u></b>	<b><u>Current O&amp;M Cost Information</u></b>	<b><u>Cost</u></b>
<b>Purchase Cost:</b> \$60,000 <b>Inflation Adjustment (4%/YR)</b> <b>Estimated Cost:</b>  <i>Rounded up to 100's</i> <b>Total Estimated Cost:</b> <b>\$60,000</b>	<b>Current cost of annual repairs:</b> <b>Potential For lost conveyance (if appl)</b> <b>Other O&amp;M Cost:</b> <b>ANNUAL O&amp;M COST:</b>	

**Description of current circumstances that drive this request:** *(include age and condition of existing equipment)*

According to the Arc Flash Hazard Analysis 2018 performed by Reclamation TSC, molded case circuit breakers are required to be upgraded at Jones Pumping Plant.

**Description of how this request would change current circumstances:**

Upgrading the breakers will be in compliance with the recommendations from the Arc Flash Hazard Analysis 2018. These will provide improvement in safety and equipment by minimizing the incident energy during a fault and provide guidelines of appropriate personal protective equipment for various equipments' arc flash boundaries.

**Other options considered during evaluation:**

No other options were considered.

**Conclusion/Recommendation:**

Upgrading the breakers will improve safety, damage mitigation, and updates equipment that are soon to be obsolete.

**SPECIAL PROJECT JUSTIFICATION FORM  
FY2023**

**REQUEST DATE:** Sept 28, 2021  
**PRIORITY CODE:** - -

**EXPENSE CODE:** 5301  
**BUDGET UNIT:** 45

**Type of Purchase**

- Materials
- Services
- Other:

**PROJECT DESCRIPTION:**

OPP - Cooling Water Strainer (2 replace/yr)

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

Basket water strainer, self-cleaning, 3 Inch, Kinney Mfr

<b><u>ESTIMATED COST(incl taxes, freight)</u></b>	<b><u>Current O&amp;M Cost Information</u></b>
<b>Purchase Cost:</b> <b>Inflation Adjustment (4%/YR)</b> <b>Estimated Cost:</b>  <i>Rounded up to 100's</i> <b>Total Estimated Cost: <u>\$22,000</u></b>	<b>Cost</b> <b>Current cost of annual repairs:</b> <b>Potential For lost conveyance (if appl)</b> <b>Other O&amp;M Cost:</b> <b>ANNUAL O&amp;M COST:</b>

**Description of current circumstances that drive this request:** *(include age and condition of existing equipment)*

The cooling water for the OPP motors coolers is provided via a pump and strainer assembly. The strainers have been serviced regularly over the past 50 plus years of operation and are in need of replacement. This project plans on replacing two of the six strainers a year for the next three years.

The WA plans on replacing with the same manufacturer as the units are very reliable and parts are readily available.

**Description of how this request would change current circumstances:**

The existing units have been rebuilt with new shafts and replacement inserts. The baskets and the sealing surfaces have worn beyond repair and need to be replaced.

**Other options considered during evaluation:**

None at this time, as the current strainers have a proven life

**Conclusion/Recommendation:**

Replace the strainers with the same manufacturer (Kinney) with a plan of two per year.

**SPECIAL PROJECT JUSTIFICATION FORM  
FY2023**

**REQUEST DATE:**  
**PRIORITY CODE:**     -     -

**EXPENSE CODE:**  
**BUDGET UNIT:**

**Type of Purchase**

- Materials
- Services
- Other:

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

OPP - Sand Filter Valve Set

<b><u>ESTIMATED COST(incl taxes, freight)</u></b>	<b><u>Current O&amp;M Cost Information</u></b>	<b><u>Cost</u></b>
<b>Purchase Cost:</b> <b>Inflation Adjustment (4%/YR)</b> <hr/> <b>Estimated Cost:</b>  <i>Rounded up to 100's</i>	<b>Current cost of annual repairs:</b> <b>Potential For lost conveyance (if appl)</b> <b>Other O&amp;M Cost:</b> <b>ANNUAL O&amp;M COST:</b>	
<b>Total Estimated Cost:     <u>\$12,500</u></b>		

**Description of current circumstances that drive this request:** *(include age and condition of existing equipment)*

The five (5) sand filters at OPP provide the filtered water necessary for plant operations. The unit packing water and bearing flushing water is provided via these filters. There are a set of 5 valves per unit that allow for the filter to be back flushed and returned to service fairly quickly. The valves are original and are at the end of their service life. They are hard to operate and servicing has not improved that condition.

The WA plans on replacing one set and evaluating if this set can be converted to a semi-automatic operation that would allow the Control Operators from JPP to backflush the sand filters at night or on the weekend.

**Description of how this request would change current circumstances:**

The replacement valves should allow for semi-automatic operation of the sand filters. This will also replace valves that are over 50 years old.

**Other options considered during evaluation:**

Replace like in kind and continue with manual operation. This is acceptable, but seem appropriate to automate the system

**Conclusion/Recommendation:**

Purchase one set of valves and develop a plan for semi-automatic operation and then install that system on the remaining four (4) sand filters.

**SPECIAL PROJECT JUSTIFICATION FORM  
FY2023**

**REQUEST DATE:** Sept 28, 2021  
**PRIORITY CODE:** - -

**EXPENSE CODE:** 5301  
**BUDGET UNIT:** 45

**Type of Purchase**

- Materials
- Services
- Other:

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

OPP - Spare Vacuum Pump w/ motor
Rougher Vacuum Pump (Generation)

<b><u>ESTIMATED COST(incl taxes, freight)</u></b>	<b><u>Current O&amp;M Cost Information</u></b>	<b><u>Cost</u></b>
<b>Purchase Cost:</b>	<b>Current cost of annual repairs:</b>	
<b>Inflation Adjustment (4%/YR)</b> 18,500	<b>Potential For lost conveyance (if appl)</b>	Significant
<b>Estimated Cost:</b>	<b>Other O&amp;M Cost:</b>	
<i>Rounded up to 100's</i>	<b>ANNUAL O&amp;M COST:</b>	
<b>Total Estimated Cost: \$ 18,500</b>		

**Description of current circumstances that drive this request:** *(include age and condition of existing equipment)*  
The O'Neill plant pumps DMC water into the forebay for SLR, and it also allows for water to be released from the forebay into the DMC. As the OPP penstocks do not penetrate the dam, large vacuum pumps are necessary to evacuate tube and start the water flowing from the forebay and into the DMC. Vacuum pumps are original to the plant and have been serviced regularly. The pumps are beyond the normal 30-year service life of the pump and motor unit of this size.

The reliability of these vacuum pumps is critical when generation is necessary. All three rougher pumps must be in operation to start the flow of water into the units.

**Description of how this request would change current circumstances:**  
There are three of the large rougher pumps at OPP. This will replace one of the three units. The WA staff will evaluate the unit and determine if the other two should be of this type/mfr or an alternate.

**Other options considered during evaluation:**

None at this time

**Conclusion/Recommendation:**  
Purchase replacement pump motor assembly and evaluate its operation to determine applicable replacement for the remaining two rougher vacuum pumps

**SPECIAL PROJECT JUSTIFICATION FORM**

**FY2023**

**REQUEST DATE:** 8/30/2021

**EXPENSE CODE:** 5311

**PRIORITY CODE:** - -

**BUDGET UNIT:** 45

**Type of Purchase**

- Materials
- Services
- Other:

**PROJECT DESCRIPTION:**

OPP Servo Spare Piston Rings Acquisition

**GENERAL SPECIFICATIONS:**

**(See attached information)**

<b><u>ESTIMATED COST(incl taxes, freight)</u></b>	<b><u>Current O&amp;M Cost Information</u></b>	<b><u>Cost</u></b>
<b>Purchase Cost:</b> \$55,000	<b>Current cost of annual repairs:</b>	
<b>Inflation Adjustment (4%/YR)</b>	<b>Potential For lost conveyance (if appl)</b>	
<b>Estimated Cost:</b>	<b>Other O&amp;M Cost:</b>	
<i>Rounded up to 100's</i>	<b>ANNUAL O&amp;M COST:</b>	
<b>Total Estimated Cost:</b> \$55,000		

**Description of current circumstances that drive this request:** *(include age and condition of existing equipment)*

The servo motor that controls vane position of the propeller utilizes two sets of three unique piston rings on each servo. These rings maintain the pressure differential across the piston, and are critical to the unit's operation. They get damaged from time to time and all of the spares have been used. New replacements will be needed.

**Description of how this request would change current circumstances:**

Having spare piston rings on hand will reduce the impact of a forced outage resulting from a failed ring and will reduce the duration of planned outages that result in the identification of piston ring replacements, such as during the rehabs of the units which will continue next year.

**Other options considered during evaluation:**

There are not any reasonable alternatives to replacing the piston rings. If they are left out, the vane control will not operate and the unit will not be able to pump water.

**Conclusion/Recommendation:**

Have more piston rings produced so that a few are on hand. The more that are produced at once, the lower the cost of each sleeve is. Their need is imminent, so buying in bulk will save money in the long run.

**SPECIAL PROJECT JUSTIFICATION FORM**

**FY2023**

**REQUEST DATE:** 8/30/2021

**EXPENSE CODE:** 5311

**PRIORITY CODE:** - -

**BUDGET UNIT:** 44

**Type of Purchase**

- Materials
- Services
- Other:

**PROJECT DESCRIPTION:**

JPP Shaft Sleeve Fabrication

**GENERAL SPECIFICATIONS:**

**(See attached information)**

<b><u>ESTIMATED COST(incl taxes, freight)</u></b>	<b><u>Current O&amp;M Cost Information</u></b>	<b><u>Cost</u></b>
<b>Purchase Cost:</b> \$60,000 <b>Inflation Adjustment (4%/YR)</b> <b>Estimated Cost:</b>  <i>Rounded up to 100's</i> <b>Total Estimated Cost:</b> <b>\$60,000</b>	<b>Current cost of annual repairs:</b> <b>Potential For lost conveyance (if appl)</b> <b>Other O&amp;M Cost:</b> <b>ANNUAL O&amp;M COST:</b>	

**Description of current circumstances that drive this request:** *(include age and condition of existing equipment)*

Shaft sleeves are a consumable part. They provide a barrier between the pump shaft and the packing. Under operation the friction between the rotating shaft and stagnant packing wears away at the shaft sleeve instead of the pump shaft itself. The last shaft sleeve on the shelf was installed on Unit 1 during the rewind project.

**Description of how this request would change current circumstances:**

Manufacturing new shaft sleeve's will ensure that they are available when they are needed. As they are consumable their need is imminent, and pumping operations will be protected if shaft sleeves are on the shelf, as opposed to having to wait to manufacture them while a unit is out.

**Other options considered during evaluation:**

There are not any reasonable alternatives to replacing the shaft sleeves. If they are left out, damage will occur on the pump shaft which would lead to a more critical and expensive repair.

**Conclusion/Recommendation:**

Have more sleeves produced so that a few are on hand. The more that are produced at once, the lower the cost of each sleeve is. Their need is imminent so buying in bulk will save money in the long run.

**SPECIAL PROJECT JUSTIFICATION FORM**

**FY2023**

**REQUEST DATE:** 9/1/2021  
**PRIORITY CODE:** - -

**EXPENSE CODE:** 5311  
**BUDGET UNIT:** 60

**Type of Purchase**

- Materials
- Services
- Other:

**PROJECT DESCRIPTION:**

DCI Anode Replacement

**GENERAL SPECIFICATIONS:**

**(See attached information)**

<b><u>ESTIMATED COST(incl taxes, freight)</u></b>	<b><u>Current O&amp;M Cost Information</u></b>	<b><u>Cost</u></b>
<b>Purchase Cost:</b> \$45,000 <b>Inflation Adjustment (4%/YR)</b> <b>Estimated Cost:</b>  Rounded up to 100's <b>Total Estimated Cost:</b> <b>\$45,000</b>	<b>Current cost of annual repairs:</b> <b>Potential For lost conveyance (if appl)</b> <b>Other O&amp;M Cost:</b> <b>ANNUAL O&amp;M COST:</b>	

**Description of current circumstances that drive this request:** *(include age and condition of existing equipment)*  
 Annual Cathodic Protection System Survey has found that 2 anodes have failed to pass NACE SP0169-2013, Section 6.2. The anodes are considered inadequate in protecting the penstocks from corrosion.

**Description of how this request would change current circumstances:**  
 This request includes performing replacing the failed anodes and commissioning tests. The cathodic protection system will be repaired and the penstocks will be protected from corrosion.

**Other options considered during evaluation:**

No other options were considered.

**Conclusion/Recommendation:**

The anode replacement is a cost-effective way to protect the penstocks from corrosion.



**SPECIAL PROJECT JUSTIFICATION FORM**

**FY2023**

**REQUEST DATE:** 8/30/2021

**EXPENSE CODE:** 5521

**PRIORITY CODE:** - -

**BUDGET UNIT:** 60

**Type of Purchase**

- Materials
- Services
- Other: Equipment

**PROJECT DESCRIPTION:**

Ultrasonic Testing Device

**GENERAL SPECIFICATIONS:**

**(See attached information)**

<b><u>ESTIMATED COST(incl taxes, freight)</u></b>	<b><u>Current O&amp;M Cost Information</u></b>
<b>Purchase Cost:</b> \$6,000	<b>Current cost of annual repairs:</b>
<b>Inflation Adjustment (4%/YR)</b>	<b>Potential For lost conveyance (if appl)</b>
<b>Estimated Cost:</b>	<b>Other O&amp;M Cost:</b>
<i>Rounded up to 100's</i>	<b>ANNUAL O&amp;M COST:</b>
<b>Total Estimated Cost:</b> \$6,000	

**Description of current circumstances that drive this request:** *(include age and condition of existing equipment)*

The Water Authority currently owns a twenty-year-old ultrasonic device. It is capable of detecting material thicknesses on nearly flat surfaces. Additionally, the battery does not hold a charge and the device must be plugged in at all times to operate.

**Description of how this request would change current circumstances:**

Technology has come a long way in twenty years for ultrasonic devices. We are currently interested in analyzing the wall thickness of cooling water pipes in our system. Modern ultrasonic devices can measure wall thickness of thin-walled pipe. They are also capable of giving a clearer picture of unbond between metal surfaces, like the Babbitt to steel bond on the thrust shoes.

**Other options considered during evaluation:**

The model currently owned by the Water Authority still functions, and a new battery could be purchased, but the device would only be useful for the pressure vessel certifications we have used it for in the past. It cannot be made capable of serving the needs that a new device can.

**Conclusion/Recommendation:**

Purchase a new ultrasonic device that can perform the tasks we have historically used a UT device for as well as meet the more recent needs of the company, like small diameter piping wall thickness measurements and delamination.

**EQUIPMENT PURCHASE JUSTIFICATION FORM  
FY2023**

**REQUEST DATE:** Sept 28, 2021

**EXPENSE CODE:** 5521

**PRIORITY CODE:** - -

**BUDGET UNIT:** 43

**Type of Purchase**

- New Equipment/Furniture > \$10,000
- Replacement Equipment/Furniture
- Other:

**EQUIPMENT DESCRIPTION:**

Electrical test equipment (list below)

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

Boroscope, Laptops (3), IR scope (2), Oscilloscope, and Power Quality Meter

<b><u>ESTIMATED COST (incl taxes, freight)</u></b>	<b><u>Current O&amp;M Cost Information</u></b>	<b><u>Cost</u></b>
<b>Purchase Cost:</b>	<b>Current cost of annual repairs:</b>	
<b>Inflation Adjustment (4%/YR)</b> \$25,600	<b>Annual lease/rental cost:</b>	
<b>Estimated Cost:</b>	<b>Other O&amp;M Cost:</b>	
	<b>ANNUAL O&amp;M COST:</b>	
<i>Rounded up to 100's</i>		
<b>Total Estimated Cost:</b> <b><u>\$25,600</u></b>		

**CURRENT/PROJECTED COST W/O EQUIPMENT:** N/A                      **PAYBACK** N/A **YRS**

*(Payback is determined by dividing Total Estimated Cost by Annual O&M Cost)*

**Description of current circumstances that drive this request:** *(include age and condition of existing equipment)*

The electrical and C&I crew members use some very specialized test equipment. With more equipment being controlled digitally, different types of test equipment are necessary. There are also new Reclamation standards for inspecting for potential fire hazards (infrared inspections of cable trays).

Description	Cost	Notes
Boroscope	3,000	Equipment allows for viewing internal components without major dis-assembly. This level of scope allows for better focusing and adjusting camera perspective, versus the \$100 versions.
Laptops for technicians	8,100 (3 total)	The C&I technicians and plant electricians have a significant number of equipment that requires a laptop to communicate with the controls
IR Scope	7,000 (2 total)	These Infra-Red(IR) scopes are needed to inspect the plant cable trays for cable heating. this is a new requirement from Reclamation as a result of the DWR Thermolito fire
Oscilloscope	4,000	The C&I technicians test a lot of instruments and the oscilloscope will allow them to better monitor and evaluate the signals from this equipment.

Power Quality Meter	3,500	This meter is necessary to test and accurately document the accuracy of the sensing devices used to monitor the efficiency of the motors
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**Other options considered during evaluation:**

Renting the equipment is a potential option, but it does not seem practical to rent and return. We would also have to hope that the varying equipment rented has the same capabilities and properly calibrated to ensure accuracy

**Conclusion/Recommendation:**

All this equipment is necessary for the electrical and C&I staff to perform their work.

**EQUIPMENT PURCHASE JUSTIFICATION FORM  
FY2023**

**REQUEST DATE:** Sept 28, 2021

**EXPENSE CODE:** 5521

**PRIORITY CODE:** - -

**BUDGET UNIT:** 44

**Type of Purchase**

- New Equipment/Furniture > \$10,000
- Replacement Equipment/Furniture
- Other:

**EQUIPMENT DESCRIPTION:**

Mechanical equipment replacement (see list below)

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

Iron Worker, 50 Ton Hydraulic (replacement) and Vertical Milling machine, Bridgeport, rebuilt unit (replacement)

<b><u>ESTIMATED COST (incl taxes, freight)</u></b>		<b><u>Current O&amp;M Cost Information</u></b>		<b><u>Cost</u></b>
<b>Purchase Cost:</b>		<b>Current cost of annual repairs:</b>		
<b>Inflation Adjustment (4%/YR)</b>	\$24,000	<b>Annual lease/rental cost:</b>		
<b>Estimated Cost:</b>		<b>Other O&amp;M Cost:</b>		
		<b>ANNUAL O&amp;M COST:</b>		
<i>Rounded up to 100's</i>				
<b>Total Estimated Cost:</b>	<b><u>24,000</u></b>			

**CURRENT/PROJECTED COST W/O EQUIPMENT:** N/A

**PAYBACK** N/A **YRS**

*(Payback is determined by dividing Total Estimated Cost by Annual O&M Cost)*

**Description of current circumstances that drive this request:** *(include age and condition of existing equipment)*

The existing iron worker was obtained using the government surplus program over 15 years ago. It has been a workhorse in the Tracy Machine Shop, as it saves considerable time punching holes versus drilling. Also punch/die sets can last for years when used properly.

The existing small vertical mill at the Tracy Machine Shop was government equipment turned over in 1993. Although it still operates well, the tooling for the odd manufacturer is hard to find and expensive. While Bridgeport mills are the industry standard and rebuilt machines are readily available. This price should also allow for the unit to be powered making it more efficient and repeatable.

**Description of how this request would change current circumstances:**

The replacement equipment will allow the crew to continue to fabricate the necessary parts, etc. Having the Bridgeport Mill will allow the crew to spend less on tooling and having a power feed will make them much more efficient when required to fabricate multiples of a part.

The iron worker has been rebuilt by the crew once, but the seals can no longer hold at the higher pressures. The unit punched all of the 1-1/2" holes thru 1/2" bar stock to fabricate all of the trash racks for JPP, approximately 6,500 holes in total.

**Other options considered during evaluation:**

None considered as rental does not seem appropriate.

**Conclusion/Recommendation:**

Replace the equipment

# San Luis & Delta-Mendota Water Authority

## Extraordinary Operations & Maintenance Budget

FY2023

**FY 2023 PROJECTS FUNDING SUMMARY**

**Project Type: EXTRAORDINARY O&M (Fund 26)**

<u>Project #</u>	<u>Fac</u>	<u>Project Title</u>	<u>Segment Code</u>	<u>Priority</u>	<u>Labor</u>	<u>Parts/Mat'ls</u>	<u>Equip.</u>	<u>Contract</u>	<u>Total</u>
M2022001	ONP	OPP Pump Bowl Replacement - Phase 1 of 6	26-J2	A-1-b	\$40,500	\$0	\$0	\$1,755,500	\$1,796,000
E2019028	ONP	Station Service Backup Battery System Replacement	26-K0	B-2-c	\$19,700	\$0	\$0	\$110,000	\$129,700
C2021004	DMC	DMC Subsidence Correction Project (CA & MOA Mgmt)(I3)	26-I3	B-3-c	\$721,100	\$0	\$3,100	\$847,800	\$1,572,000
E1995005	ONP	Main Transformer Rehabilitation - Phase 3 of 3	26-G3	B-3-c	\$0	\$0	\$0	\$2,100,000	\$2,100,000
C1997002	DMC	O&M Road Maintenance Program - Phase 2 of 10	26-E6	B-4-b	\$13,300	\$0	\$0	\$232,000	\$245,300
C2023001	JPP	Concrete Slab by Trashrake Dumpster	26-K1	B-4-b	\$38,600	\$0	\$0	\$450,000	\$488,600
M2019005	DCI	HVAC System Rehabilitation/Replacement	26-K2	B-4-c	\$51,000	\$24,400	\$0	\$24,000	\$99,400
C2021003	DMC	DMC Turnout Flowmeter Upgrade - Phase 3 of 3	26-I6	B-4-c	\$6,200	\$0	\$0	\$255,000	\$261,200
S2023001	ALL	SCADA System Evaluation	26-K5	B-5-b	\$20,800	\$0	\$0	\$150,000	\$170,800
E2023001	ONP	ONP Accusonic Flowmeter Console Upgrades	26-K6	B-5-c	\$18,200	\$0	\$0	\$159,000	\$177,200
<b>EXTRAORDINARY O&amp;M (Fund 26) PROJECT TOTALS</b>					<b>\$929,400</b>	<b>\$24,400</b>	<b>\$3,100</b>	<b>\$6,083,300</b>	<b>\$7,040,200</b>

**Project Type: RESERVE (Fund 26)**

<u>Project #</u>	<u>Fac</u>	<u>Project Title</u>	<u>Segment Code</u>	<u>Priority</u>	<u>Labor</u>	<u>Parts/Mat'ls</u>	<u>Equip.</u>	<u>Contract</u>	<u>Total</u>
V1999001	ALL	Heavy Equipment Replacement Program (Reserve Fund)	26-D2	B-5-b	\$0	\$0	\$0	\$249,300	\$249,300
V1999002	ALL	Vehicle Replacement (Reserve Fund)	26-D1	B-6-c	\$0	\$0	\$0	\$128,400	\$128,400
C2011001	ALL	Facility Infrastructure Replacement/Rehabilitation Program	26-D3	B-7-c	\$0	\$0	\$0	\$47,000	\$47,000
E2000004	ALL	Replace Computer/Network Communication Equip (Reserve Fund)	26-D0	C-6-b	\$0	\$149,200	\$0	\$0	\$149,200
<b>RESERVE (Fund 26) PROJECT TOTALS</b>					<b>\$0</b>	<b>\$149,200</b>	<b>\$0</b>	<b>\$424,700</b>	<b>\$573,900</b>

**FUND 26 PROJECT TOTALS: \$929,400 \$173,600 \$3,100 \$6,508,000 \$7,614,100**

**Project Type: CAPITAL IMPROVEMENT (Fund 25)**

<u>Project #</u>	<u>Fac</u>	<u>Project Title</u>	<u>Segment Code</u>	<u>Priority</u>	<u>Labor</u>	<u>Parts/Mat'ls</u>	<u>Equip.</u>	<u>Contract</u>	<u>Total</u>
E1999001	JPP	Unit Rewind - Phase 6 (U4 & U3)	25-F4	B-3-a	\$550,000	\$0	\$0	\$3,497,200	\$4,047,200
<b>CAPITAL IMPROVEMENT (Fund 25) PROJECT TOTALS</b>					<b>\$550,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,497,200</b>	<b>\$4,047,200</b>

**FUND 25 PROJECT TOTALS: \$550,000 \$0 \$0 \$3,497,200 \$4,047,200**

**FISCAL YEAR 2023 GRAND TOTAL (Funds 25 & 26): \$1,479,400 \$173,600 \$3,100 \$10,005,200 \$11,661,300**

**SL&DMWA 10 Year Plan (EO&M, Reserves & CIP Projects)**

**WORKING DRAFT**

EO&M #	Project Title	Facility	Priority	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	10 Yr. Plan Total	
<b>Fund: 26</b>															
										<i>Estimated Project Cost (x \$1,000)</i>					
M2022001	Pump Bowl Replacement Project - Phase 1 of 6	ONP	A-1-b	1,796.0	1,450.0	1,450.0	1,450.0	1,450.0	1,450.0					<b>9,046</b>	
E2019028	Station Service Backup Battery System Replacement	ONP	B-2-c	129.7										<b>130</b>	
C2021004	DMC Subsidence Correction Project (CA & MOA Mgmt)(I	DMC	B-3-c	1,572.0										<b>1,572</b>	
E1995005	Main Transformer Rehabilitation	ONP	B-3-c	2,100.0										<b>2,100</b>	
C1997002	O&M Road Maintenance Program	DMC	B-4-b	245.3	221.6	226.0	230.6	235.2	239.9	244.7	249.6	254.6	259.6	<b>2,407</b>	
C2023001	Replace Failed Asphalt by Trashrake Dumpster	JPP	B-4-b	488.6										<b>489</b>	
C2021003	Flowmeter Upgrade Program	DMC	B-4-c	261.2										<b>261</b>	
M2019005	HVAC System Rehabilitation/Replacement	DCI	B-4-c	99.4										<b>99</b>	
S2023001	SCADA System Evaluation	ALL	B-5-b	170.8										<b>171</b>	
E2023001	ONP Accusonic Flowmeter Console Upgrades	ONP	B-5-c	177.2										<b>177</b>	
E2015003	Arc Flash Study - JPP	JPP	A-1-b		105.0					116.0				<b>221</b>	
E2009003	SCADA, Controls and Protection System Modernization	ONP	B-2-b		227.0	234.0								<b>461</b>	
M1994022	ONP Cooling Water System Rehabilitation	ONP	B-2-b		250.0									<b>250</b>	
M2022002	Pump Assembly and Penstock Rehabilitation Program	ONP	B-3-b		2,623.6	2,702.0	2,783.4	1,200.0	1,000.0	1,500.0				<b>11,809</b>	
E2022002	Lower DMC Communication System Replacement	DMC	B-4-c		215.0									<b>215</b>	
C1996012	Intake Channel Embankment Stabilization	DMC	B-3-b			300.0								<b>300</b>	
C2015004	DMC 5 Yr Subsidence Survey	DMC	B-3-c			83.0					91.0			<b>174</b>	
E2019003	Check Electrical Equipment Rehabilitation	DMC	B-4-c			84.0								<b>84</b>	
M2019002	Sandfilter System Rehabilitation	JPP	B-4-c			100.0								<b>100</b>	
M2019028	Plant Flowmetering System Rehabilitation	JPP	B-4-c			250.0								<b>250</b>	
M2019037	Plant Water Storage Tank Rehabilitation	ONP	B-4-c			150.0								<b>150</b>	
M2019045	Stub Shaft Crane Rehabilitation	JPP	B-4-c			60.0								<b>60</b>	
M2019001	O'Neill PP Bridge Crane Rehabilitation	ONP	B-5-c			113.0								<b>113</b>	
M2019044	Machine Shop Crane Rehabilitation	JPP	B-5-c			75.0								<b>75</b>	
M2019049	Lakeside & Canalside Trashrack Replacement	ONP	B-5-c			175.7								<b>176</b>	
M2019022	HVAC System Rehabilitation/Replacement	JPP	B-4-b				400.0							<b>400</b>	
C2009001	Retaining Wall Rehabilitation	JPP	B-5-b				125.0							<b>125</b>	
C2022001	Retaining Wall Rehabilitation	JPP	B-5-b				125.0							<b>125</b>	
E2015001	TFO/LBFO/DCI Arc Flash Study	ALL	A-1-b					225.0					248.0	<b>473</b>	
E2019024	Station Service Backup Battery System Replacement	JPP	B-2-c					115.0						<b>115</b>	
E2022001	Plant Protective Replay Replacement	DCI	B-3-b					100.0						<b>100</b>	
E2009004	UPS Battery Replacement	JPP	B-4-b					88.0						<b>88</b>	
E2019002	SCADA & Communication System Improvements	DCI	B-4-c					88.0						<b>88</b>	
M2019016	Siphon Breaker Valve Control System Rehabilitation	JPP	B-4-c					100.0						<b>100</b>	
C2019005	Penstock/Manifold Interior Coating Rehabilitation	DCI	B-5-b					150.0						<b>150</b>	
E2019004	Penstock Cathodic Protection System Replacement	DCI	B-5-b					88.0						<b>88</b>	
M2019014	Stoplog Rehabilitation	JPP	B-5-b					250.0						<b>250</b>	
M2019009	Flowmetering Upgrade	DCI	B-5-c					100.0						<b>100</b>	
M2019026	Stoplog Rehabilitation (Lakeside)	ONP	B-5-c					75.0						<b>75</b>	
M2015003	Rehabilitate Coating on Pump Casings & Bifurcation	JPP	B-3-c						100.0	102.0	104.0			<b>306</b>	
C2019004	TFO O&M Complex Pavement Rehabilitation	TFO	B-4-b						250.0					<b>250</b>	
M2017001	OPP Shaft Sleeve Manufacturing	ONP	B-4-c						102.0					<b>102</b>	
E2019025	Plant Security System Upgrades	JPP	B-5-c						75.0					<b>75</b>	

**SL&DMWA 10 Year Plan (EO&M, Reserves & CIP Projects)**

**WORKING DRAFT**

EO&M #	Project Title	Facility	Priority	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	10 Yr Plan Total
M2019032	Trashrack Cleaner & Stoplog Crane Rehabilitation	ONP	B-5-c						200.0					200
E2022005	Plant Protective Equipment Replacement	ONP	B-2-b							150.0				150
C2016001	DMC Road Rehabilitation	DMC	B-4-b							391.0				391
M2019025	100 Ton Gantry Crane Rehabilitation	JPP	B-4-c							300.0				300
M2019043	HVAC System Rehabilitation/Replacement	ONP	B-4-c							100.0				100
E2019010	Plant Flowmeter System Rehabilitation	ONP	B-5-c							244.0				244
M2019033	Plant Roof Surface Replacement	ONP	B-7-c							100.0				100
C2019001	Radial Gate Rehabilitation Program	DMC	B-3-c								400.0	408.0	416.0	1,224
M2019038	Water System Sand Filter System Rehabilitation/Replac	ONP	B-4-b								250.0			250
M2023001	ONP Recoat Unit Exteriors (All Units)	ONP	B-4-b								1,000.0			1,000
C2023003	Recoat Exterior of All Penstocks	ONP	B-4-c								100.0			100
M2019015	Trashrack Cleaner Rehabilitation	JPP	B-4-c								300.0			300
M2022003	Automated Trashrack Cleaner	ONP	B-4-c								750.0			750
M2022004	Check Structure Gearbox Replacement Program	DMC	B-4-c								200.0			200
E2019019	Plant Security System Improvements	DCI	B-5-b								50.0			50
M2019048	Plant Hydraulic System Rehabilitation/Replacement	JPP	B-5-c								125.0			125
E2019008	Protection Relay Modernization	JPP	B-2-b									250.0		250
E2022003	Plant Protective Relay Replacement	JPP	B-2-b									150.0		150
M2019011	Check Structure Mechanical Equipment Rehabilitation	DMC	B-4-c									400.0		400
M2010001	TFO Domestic/Potable Waterline Replacement	JPP	B-5-c									250.0		250
E2014006	SCADA System Modernization	JPP	C-4-c									187.2	192.8	380
E2019023	Unit Protection System Modernization	DCI	B-2-b										100.0	100
E2019001	Pump & Motor Rehabilitation	DCI	B-3-c										259.0	259
E2019015	Plant Motor Control Center Upgrades	DCI	B-3-c										150.0	150
C2019002	Canal Embankment Erosion Protection	DMC	B-4-b										350.0	350
E2019018	Telephone & Communication System Modernization	ALL	B-4-c										100.0	100
M2019008	Pump Intake Diffuser Panel Rehabilitation/Replacement	DCI	B-4-c										75.0	75
M2019035	TFO Industrial Water Storage Tank Rehabilitation	TFO	B-4-c										125.0	125
M2019041	CA Turnout Slide Gate Rehabilitation/Replacement	DCI	B-4-c										150.0	150
E2019022	Plant Annunciator Modernization	DCI	B-5-b										150.0	150
E2019017	SCADA & Communication System Modernization	DMC	C-7-d										75.0	75
<b>FY TOTALS (x \$1,000):</b>				<b>\$7,040.2</b>	<b>\$5,092.2</b>	<b>\$6,002.7</b>	<b>\$5,114.0</b>	<b>\$4,264.2</b>	<b>\$3,416.9</b>	<b>\$3,247.7</b>	<b>\$3,619.6</b>	<b>\$1,899.8</b>	<b>\$2,650.4</b>	

**RESERVE PROJECTS**

*Estimated Project Cost (x \$1,000)*

V1999001	Heavy Equipment Replacement Program (Reserve Fund)	ALL	B-5-b	249.3	337.2	212.0		185.5	306.9	166.0		232.9		1,690
V1999002	Vehicle Replacement Program (Reserve Fund)	ALL	B-6-c	128.4	190.0	190.2	224.6	319.4	246.0	304.4	215.4	103.0		1,921
C2011001	Facility Infrastructure Replacement/Rehabilitation Progra	ALL	B-7-c	47.0	136.0	84.0	90.0	30.0	104.0	61.0	32.0	117.0	28.0	729
E2000004	Replace Computer/Network Comm Equip (Reserve Fund)	ALL	C-6-b	149.2	75.2	115.2	92.6	78.4	155.1	57.6	76.6	123.0	189.0	1,112
<b>FY TOTALS (x \$1,000):</b>				<b>\$573.9</b>	<b>\$738.4</b>	<b>\$601.4</b>	<b>\$407.2</b>	<b>\$613.3</b>	<b>\$812.0</b>	<b>\$589.0</b>	<b>\$324.0</b>	<b>\$575.9</b>	<b>\$217.0</b>	

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
<b>FUND 26 PROJECTS FY TOTALS (x \$1,000):</b>	<b>\$7,614.1</b>	<b>\$5,830.6</b>	<b>\$6,604.1</b>	<b>\$5,521.2</b>	<b>\$4,877.5</b>	<b>\$4,228.9</b>	<b>\$3,836.7</b>	<b>\$3,943.6</b>	<b>\$2,475.7</b>	<b>\$2,867.4</b>



**SL&DMWA 10 Year Plan (EO&M, Reserves & CIP Projects)**

**WORKING DRAFT**

EO&M #	Project Title	Facility	Priority	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	10 Yr Plan Total
<b>Fund: 25</b>														
<i>Estimated Project Cost (x \$1,000)</i>														
E1999001	Unit Rewinds (Rotor & Stator) All Units	JPP	B-3-a	4,047.2										<b>4,047</b>
C2015003	DMC Subsidence Correction Project	DMC	B-3-c		100,000.0	100,000.0	100,000.0	100,000.0	100,000.0	100,000.0				<b>600,000</b>
E2009005	Excitation System & Control Modernization	JPP	B-3-c	1,424.3	991.8	1,033.0	1,051.0	1,070.0	1,090.0					<b>6,660</b>
E2015004	Station Service & Distribution Equip Replacement	JPP	B-3-b		1,500.0									<b>1,500</b>
C1994005	Design & Construct Warehouse & Machine Shop Buildin	ONP	B-4-c		400.0									<b>400</b>
E2019005	Station Service SWBD & Breaker Replacement	JPP	B-2-b			450.0		2,600.0	2,675.0					<b>5,725</b>
E2022004	Switchgear Paralleling	JPP	B-3-c			2,000.0								<b>2,000</b>
C2015006	Replace DMC Althea Ave Bridge	DMC	B-4-c					1,500.0	1,545.0					<b>3,045</b>
C2015002	Check Structure Bypass Pumping Plants	DMC	B-3-c							100.0	500.0	500.0		<b>1,100</b>
E2004002	Unit Rotor & Stator Rewind (All Units)	ONP	B-3-c							2,250.0	2,295.0	2,341.0		<b>6,886</b>
C2015005	Replace DMC Russell Ave Bridge	DMC	B-4-c							1,500.0	1,545.0			<b>3,045</b>
<b>FY TOTALS (x \$1,000):</b>				<b>\$4,047.2</b>	<b>\$101,424.3</b>	<b>\$102,891.8</b>	<b>\$103,483.0</b>	<b>\$101,051.0</b>	<b>\$105,170.0</b>	<b>\$105,310.0</b>	<b>\$3,850.0</b>	<b>\$4,340.0</b>	<b>\$2,841.0</b>	

	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>
<b>FUND 25 PROJECTS FY TOTALS (x \$1,000):</b>	<b>\$4,047.2</b>	<b>\$101,424.3</b>	<b>\$102,891.8</b>	<b>\$103,483.0</b>	<b>\$101,051.0</b>	<b>\$105,170.0</b>	<b>\$105,310.0</b>	<b>\$3,850.0</b>	<b>\$4,340.0</b>	<b>\$2,841.0</b>

	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>
<b>FISCAL YEAR GRAND TOTALS:</b>	<b>\$11,661.3</b>	<b>\$107,254.9</b>	<b>\$109,495.9</b>	<b>\$109,004.2</b>	<b>\$105,928.5</b>	<b>\$109,398.9</b>	<b>\$109,146.7</b>	<b>\$7,793.6</b>	<b>\$6,815.7</b>	<b>\$5,708.4</b>

**10 Year Plan EO&M and CIP Grand Total (x\$1,000): \$682,207.9**

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

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**Project No.:** M2022001

**Segment Code:** J2-2023

**Priority:** A-1-b

**Facility:** ONP

**Project Lead:** MENG

**Project Title:** OPP Pump Bowl Replacement - Phase 1 of 6

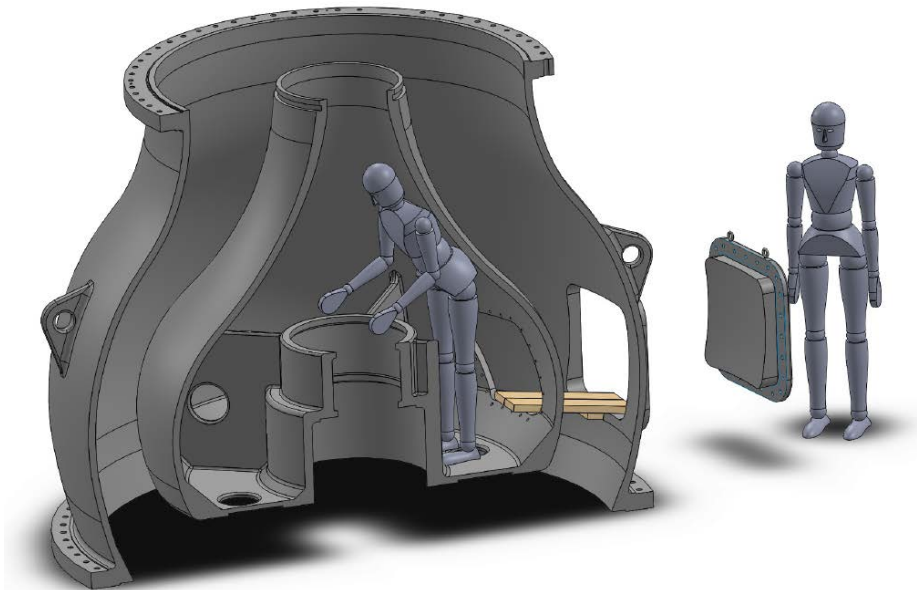
**Estimated Total Cost:** \$1,796,000.00

**Labor:** \$40,500    **Materials:** \$0    **Equipment:** \$0    **Contract Costs:** \$1,755,500

**Project Description and Scope:**

The project will procure and install one (1) pump bowl from the original manufacturer Fairbanks Morse/Pentair using Reclamation approved design and fabrication specifications obtained through the previously funded FY22 EO&M project. The new pump bowls will incorporate an access opening which will allow easier and safer access to the inner cavity for inspection and maintenance activities. The remaining 5 pumps bowls will be procured one per year through five (5) additional phases.

Labor costs include time associated with the Authority's engineering staff working with Reclamation and Fairbanks Morse/Pentair. Installation of the pump bowl will be completed during the OPP Pump Assembly and Penstock Rehabilitation Program planned for FY24.



**Project Purpose and Background**

The original pump bowl had been modified by Reclamation in the early 1970's to allow for personnel to enter the area and maintain the pump bearings. This led to a confined space that was very difficult to enter and nearly impossible to leave if injured. The Authority worked with Reclamation and ultimately determined that the original manufacturer should design and fabricate a replacement pump bowl with an access opening that allows safer access to the pump bearings. Reclamation also stated in a 2019 Technical memorandum that the OPP pumps have reached the end of their useful life. The Authority will be working with Fairbanks Morse/Pentair and Reclamation on the design specifications the bowls through the FY2022 EO&M funding in order to begin the procurement process in FY23.

Once the new pump bowl is installed, it will allow the work to be completed in a much safer manner with a significant reduction in labor hours as staff will be able to easily enter and exit the space.

**Project Status:**

Phase 1 (FY23 Project) - Awaiting Funding

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

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***Project No.:*** E2019028

***Segment Code:*** K0-2023

***Priority:*** B-2-c

***Facility:*** ONP

***Project Lead:*** EENG

***Project Title:*** Station Service Backup Battery System Replacement

***Estimated Total Cost:*** \$129,700.00

***Labor:*** \$19,700    ***Materials:*** \$0    ***Equipment:*** \$0    ***Contract Costs:*** \$110,000

***Project Description and Scope:***

The station service battery bank consists of 60 - lead-calcium battery cells, rated 125 volts and 240 ampere-hours at an 8-hour discharge rate. The batteries are charged by a battery charger that keep the 125VDC control power within 1% at full load with a maximum of 10% variation in the alternative power supply.

The batteries were installed in 2003 and typically have a 15-year life. The project will involve replacement and disposal of the battery bank by the contractor.

***Project Purpose and Background***

These batteries provide power for the controls of the OPP Units, they are critical for the operation of the plant. The USBR recommended life span of the batteries is 15 years, these will be 20 years old when they are replaced.

***Project Status:***

FY2023 Project - Awaiting approval/funding



**FY2023**  
**C2021004**  
**DMC Subsidence Correction Project (CA & MOA Mgmt)**  
**26-13**

<b>Total Fully Burdened Labor Cost</b>	<b>\$</b>	<b>721,100.00</b>
<b>Total Materials</b>	<b>\$</b>	<b>-</b>
<b>Total Vehicles &amp; Equipment</b>	<b>\$</b>	<b>3,100.00</b>
<b>Total Contracts</b>	<b>\$</b>	<b>847,800.00</b>
<b>Project Grand Total</b>	<b>\$</b>	<b><u>1,572,000.00</u></b>

**Date Proposal Completed:** 9/27/2021\_BM

*NOTE: All costs are rounded up to the nearest \$100.*

	Overall Project Estimate	Total Fully Burdened Labor Cost (EO&M Only)	Total Materials	Total Vehicles & Equipment	Total Contracts	Project Grand Total
	FY21	\$ 40,100.00			\$ 500,000.00	\$ 540,100.00
	FY22	\$ -			\$ 500,000.00	\$ 500,000.00
	FY22 RO&M Labor:	\$ 222,570.75			\$ 3,965.00	\$ 226,535.75
					Total Funding-to-Date:	<b>\$ 1,266,635.75</b>
	Total Project Cost Estimate (SLDMWA Cost):	\$ 983,680.00	\$ -	\$ 3,100.00	\$ 3,389,300.00	\$ 4,376,080.00
					Total USBR Cost Estimate:	\$ 1,301,000.00
						<b>\$ 5,677,080.00</b>
	Total SLDMWA 50/50 Cost Share:					\$ 2,838,540.00
	Total Funding-to-Date:					\$ 1,266,635.75
	Total SLDMWA Funding Remaining:					<b>\$ 1,571,904.25</b>
	Total Remaining Breakdown:	<b>\$ 721,009.25</b>	<b>\$ -</b>	<b>\$ 3,100.00</b>	<b>\$ 847,795.00</b>	<b>\$ 1,571,904.25</b>

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

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**Project No.:** E1995005

**Segment Code:** G3-2023

**Priority:** B-3-c

**Facility:** ONP

**Project Lead:** EENG

**Project Title:** Main Transformer Rehabilitation - Phase 3

**Estimated Total Cost:** \$2,100,000.00

**Labor:** \$0    **Materials:** \$0    **Equipment:** \$0    **Contract Costs:** \$2,100,000

**Project Description and Scope:**

This project is for the full rehabilitation of the O'Neill PG Plant (ONP) transformers by contractor. The ONP is fed via PG&E 70 kV line, through a WAPA circuit breaker to (3) Single-Phase Transformers. There are (4) transformers, where (1) is a spare, each one is 10 MVA, 72.5/4.16 kV. They are the original transformers from 1968, and the spare transformer has never been placed into service. All transformers will be included in this rehabilitation.

The SLDMWA will let a formal construction contract for the rehabilitation of all transformers per TSC prepared Design Specifications. During construction, TSC will provide engineering support, conduct field tests, and finalize drawings. Rehabilitation by the chosen contractor will consist of new gaskets, low side and neutral bushings, valves, liquid level gauges, thermowells and temperature gauges, paint, oil preservation system (conservator), fans and temperature controls, protective relay upgrade, and hazardous waste disposal.

The TSC estimate for the contract to rehabilitate the transformers is \$3.9M. \$1,808,525.98 is the remaining balance from previous FY funding. \$2.1M of additional funding is required to supplement the approved FY22 funds in order to complete the project.

**Project Purpose and Background**

Reclamation performed a condition assessment on the transformers in May 2019 and it identified that the 4 transformers are at the end of their service life. Phase 1 of this project was to perform a Value Planning/Engineering Study and develop plans and specifications for the rehabilitation project. The Value Planning Study (VP Study) findings were that since sludging is beginning to occur, the transformers need to be replaced as soon as possible. The rate of deterioration increases as sludging continues, and could result in a failure if not addressed promptly.

Quarterly Dissolved Gas Analysis (DGA) was performed in 2019 and 2020 to trend the condition of the transformers. DGA results were poor for the (3) transformers in use, and one continued to very poor condition and needed hot oil reconditioning. Phase 2 of this project consisted of developing the Contract Documents and performing hot oil reconditioning. In October 2020, hot oil reconditioning was performed on A-, B-, and C-Phase transformers to ensure the transformers would remain eligible for rehabilitation. The oil conditions were monitored frequently after the reconditioning and showed stable good conditions.

The SLDMWA contracted with Reclamation TSC to provide the Technical Design Specifications and Engineers Cost Estimate. The SLDMWA and TSC has worked closely over the last year to develop a solid set of plans and specification to ensure a successful project. TSC completed the final Design Specifications and Cost Estimates in 6/2021, and Construction is scheduled for FY2023. Phase 3 of this project is for the additional required to complete the project. TSC provided an Engineer's estimate for the construction by contractor with TSC providing construction support. SLDMWA will manage the construction contract.

**Project Status:**

Phase 1: Initial planning & data gathering

Phase 2: Hot oil reconditioning & Contract Document preparation

Phase 3: Awaiting approval/funding.

**OPP Main Transformer - Phase 3  
Budget Breakdown**

	<b>Row Labels</b>	<b>Sum of TRANSACTION_AMOUNT</b>
Salaries	<b>5101</b>	<b>14481.29</b>
	26-G3-40-21	281.21
	26-G3-53-21	3285.68
	26-G3-60-18	1831.02
	26-G3-60-21	9083.38
Overtime	<b>5102</b>	<b>5603.74</b>
	26-G3-40-21	748.21
	26-G3-53-21	3955.72
Other Professional Svcs	26-G3-60-21	899.81
	<b>5231</b>	<b>463194</b>
	26-G3-60-18	45000
	26-G3-60-20	20000
Rents/Leases	26-G3-60-21	398194
	<b>5296</b>	<b>15509.05</b>
	26-G3-60-21	15509.05
Parts & Materials	<b>5301</b>	<b>22899.79</b>
	26-G3-60-18	16520.07
	26-G3-60-21	6379.72
Outside Services	<b>5311</b>	<b>152753.31</b>
	26-G3-60-18	57673.31
	26-G3-60-21	95080
	<b>5599</b>	<b>8672.02</b>
	26-G3-40-21	212.82
	26-G3-53-21	2372.04
	26-G3-60-18	978.71
	26-G3-60-21	5108.45
	<b>Grand Total</b>	<b>683113.2</b>

<b>Expenditures To Date</b>		
	<b>ORACLE</b>	<b>NetSuite</b>
FY18-21	\$ 683,113.20	\$ 112,418.23
FY22	\$ -	\$ 50,042.59
	<b>\$ 683,113.20</b>	<b>\$ 162,460.82</b>
Total Expenditures:	<b>\$ 845,574.02</b>	

<b>FY23 Funding Request Calculations</b>	
Total Funded-to-Date:	\$ 2,654,100.00
Total Expenditures-to-Date:	\$ 845,574.02
Remaining Balance:	\$ 1,808,525.98
TSC Cost Estimate:	\$ 3,900,000.00
Additional Funding Required:	\$ 2,091,474.02
Use:	<b>\$ 2,100,000</b>

<b>Funding Summary</b>			
<b>FY</b>	<b>Phase</b>	<b>Description</b>	<b>Funded</b>
21	1	Data Gathering	\$ 108,300.00
22	2	Plans/Specs	\$ 2,545,800.00
23	3	Construction	\$ 2,100,000.00
		<b>Total:</b>	<b>\$ 4,754,100.00</b>





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

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**Project No.:** C2023001

**Segment Code:** K1-2023

**Priority:** B-4-b

**Facility:** JPP

**Project Lead:** CIVIL

**Project Title:** Concrete Slab by Trashrake Dumpster

**Estimated Total Cost:** \$488,600.00

**Labor:** \$38,600    **Materials:** \$0    **Equipment:** \$0    **Contract Costs:** \$450,000

**Project Description and Scope:**

The asphalt area (approximately 2,000 SY) around the automated JPP Trashrack Cleaner has failed due to heavy use and needs to be removed and replaced with concrete. The scope of the repair shall include complete removal of the existing asphalt and base material, compact subbase, install and compact new base material, install new reinforced concrete slab to design grades. In addition, the flow line of the existing concrete drainage ditch needs to be restored to eliminate the ponding and a new turnaround area shall be designed to allow efficient maneuvering of the dumpsters in all weather conditions.

**Project Purpose and Background**

The automated JPP Trashrack Cleaner continuously cleans the intake trash racks and disposes removed debris into a dumpster that is positioned at the east end of the plant. When the dumpster is full, it is relocated via forklift to a staging location about 50 to 75 yards north from the trash racks, for easy access and removal by a disposal company. The asphalt pavement has failed in several areas where the forklift and disposal trucks travel when accessing the dumpster locations. Maneuvering the fully loaded bins over the uneven pavement presents a safety hazard and is need of repair. In addition, it appears there is uneven settlement in the concrete drainage ditch that has caused water to pond and is most likely contributing to the failure of the asphalt pavement.

**Project Status:**

FY2023 Project - Awaiting approval/funding

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

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***Project No.:*** M2019005

***Segment Code:*** K2-2023

***Priority:*** B-4-c

***Facility:*** DCI

***Project Lead:*** MENG

***Project Title:*** HVAC System Rehabilitation/Replacement

***Estimated Total Cost:*** \$99,400.00

***Labor:*** \$51,000   ***Materials:*** \$24,400   ***Equipment:*** \$0   ***Contract Costs:*** \$24,000

***Project Description and Scope:***

The HVAC equipment at the Delta-Mendota Canal/California Aqueduct Intertie (DCI) Plant consists of six (6) ventilation fans rated at 45,000 cfm on the inlet side of the plant and 6 sets of louvers on the outlet side of the plant. These fans and louvers work together to provide cooling for the motors, and are necessary to keep the temperature in the plant within operational limits. There are also two (2) circulating fan units behind the electrical distribution panels that keep the air circulating around that equipment. The control room has three (3) heat pump units for temperature control.

This project will involve inspecting and testing all equipment and then replacing or repairing equipment, as necessary. There is approximately 720 square feet of filter pads that should be replaced along with all belts, and bearings.

***Project Purpose and Background***

The ventilation system has been problematic from the start. Now various louver control modules are broken or have broken the linkages. The ventilation system must be fully operational to support the additional two pumps at DCI, and this project will accomplish that.

***Project Status:***

FY2023 Project - Awaiting approval/funding

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

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**Project No.:** C2021003

**Segment Code:** 16-2023

**Priority:** B-4-c

**Facility:** DMC

**Project Lead:** CIVIL

**Project Title:** DMC Turnout Flowmeter Upgrade - Phase 3 of 3

**Estimated Total Cost:** \$261,200.00

**Labor:** \$6,200    **Materials:** \$0    **Equipment:** \$0    **Contract Costs:** \$255,000

**Project Description and Scope:**

The DMC Turnout Flow Meter Upgrade - Phase 3 will be the final phase of the project for the complete replacement of the mechanical open flow meters used along the DMC with McCrometer 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 be to remove the existing flow meters, adjust the brackets on the new flow meters to set the propeller to the centerline of the pipe for installation. Once the new meter is in-place and the battery to the telemetry device is installed, the unit will begin transmitting data to the collection center. This information will then be used in conjunction with the water accounting software to generate water use reports.

**Project Purpose and Background**

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.

This project will reduce the amount of man-hours required to read flow meter totalizers and transposing that information from hand written form to excel spreadsheets that make up the district use reports. The man-hour reduction for the Water Operations staff is estimated to be approximately 1,025 hours. The proposed project would allow for the flow-use data to be automatically inputted into the water accounting software to generate monthly delivery reports for water users, Reclamation and the Water Authority for O&M payments. This will not only eliminate the human errors that occur during manual meter readings and report preparation, it is also expected to reduce the time needed for the water accounting process.

**Project Status:**

FY2023 Project - Awaiting Funding/Approval

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

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***Project No.:*** S2023001

***Segment Code:*** K5-2023

***Priority:*** B-5-b

***Facility:*** ALL

***Project Lead:*** SCADA

***Project Title:*** SCADA System Evaluation

***Estimated Total Cost:*** \$170,800.00

***Labor:*** \$20,800    ***Materials:*** \$0    ***Equipment:*** \$0    ***Contract Costs:*** \$150,000

***Project Description and Scope:***

This scope of this project will be to have a consultant perform a full evaluation of our current SCADA system. The deliverables from the evaluation will be to provide architectural as-builts of our system, recommendations for improvements, and a 10-year equipment replacement plan.

***Project Purpose and Background***

The current SCADA system in place is functioning properly, but as the system ages it's critical to do a comprehensive evaluation to help with continued maintenance and to plan for the necessary upgrades. Developing architectural as-builts are a critical component to document the current system, and will aid in determining the necessary improvements. Once a plan for improvements is developed, a 10-year plan will be developed to assist with budgeting purposes. Our current system is a mixture of devices, and the ultimate goal will be to streamline the system as much as possible, to allow for easier maintenance and troubleshooting and to ensure communication remains reliable.

***Project Status:***

FY2023 Project - Awaiting approval/funding

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

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***Project No.:*** E2023001

***Segment Code:*** K6-2023

***Priority:*** B-5-c

***Facility:*** ONP

***Project Lead:*** EENG

***Project Title:*** ONP Accusonic Flowmeter Console Upgrades

***Estimated Total Cost:*** \$177,200.00

***Labor:*** \$18,200    ***Materials:*** \$0    ***Equipment:*** \$0    ***Contract Costs:*** \$159,000

***Project Description and Scope:***

The project will consist of purchasing and installing new panels to upgrade the existing penstock flowmeters at O'Neill Pumping/Generating Plant.

***Project Purpose and Background***

The existing Accusonic flowmeters (Model 7510+) were installed in the OPP penstocks in 2012 and have consistently provided accurate flowmetering data. Accusonics recently informed us that they are no longer supporting the 7510+ consoles, and their spare parts are running very low. Upgrades to the new Model 8510+ flowmeter console is critical to keep the sensors operational. This upgrade is for the panel only, and the existing sensors located within the penstocks will remain in place.

***Project Status:***

FY2023 Project - Awaiting approval/funding

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

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***Project No.:*** V1999001

***Segment Code:*** D2-2023

***Priority:*** B-5-b

***Facility:*** ALL

***Project Lead:*** CSUPT

***Project Title:*** Heavy Equipment Replacement Program (Reserve Fund)

***Estimated Total Cost:*** \$249,300.00

***Labor:*** \$0   ***Materials:*** \$0   ***Equipment:*** \$0   ***Contract Costs:*** \$249,300

***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.

**Heavy Truck/Equipment Replacement  
for Specific Reserve Account Nos. 5544 & 5547**

Equip #	Equipment	Category	RESP OFC	YEAR	ARB Regulated	Authority Service Life	Forecasted Replacement Year	EQUIPMENT REPLACEMENT COST(FY19\$)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
2627	Bottom Belly Dump Trailer	1	LBFO	1996		25	2021	\$62,000	\$ 62,000									
2630	Dump Truck	1	LBFO	2000	√	20	2022	\$180,000	\$ 180,000									
New	Water Truck	1	LBFO				2024	\$165,000		\$ 165,000								
2648	Front End Loader	1	LBFO	1993	√	30	2024	\$152,800		\$ 152,800								
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							
8057	JLG Man Lift	1	TFO	2008		20	2023	\$130,000			\$ 130,000							
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									\$ 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	2018		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										
8152	200 kW Emergency Generator - Trailer Mounted	1	LBFO	2019	√	40	2020	\$130,000										
8151	Long Reach Excavator	1	LBFO	2019	√	20	2039	\$350,000										
8145	Grader (John Deere)	1	LBFO	2019	√	25	2039	\$345,000										
8148	Bobcat	1	LBFO	2019	√	20	2040	\$75,000										
8001	20-Ton P&H Omega RT Crane	1	LBFO	1988	√	30	2023	\$300,000										
8155	Genie Man Lift (Electric)	1	TFO	2020		20	2040	\$60,000										
8160	Forklift (4K lb Capacity) JPP (LPG)	1	TFO	2020	√	20	2040	\$35,000										
8150	Grader (John Deere)	1	TFO	2019	√	20	2040	\$345,000										
8162	Case Magnum 180 Tractor	1	TFO	2020	√	20	2040	\$160,000										
8157	Mower	1	LBFO	2020		20	2040	\$25,000										
	Truck/Tractor	1	LBFO	2021	√	20	2024	\$158,000										
	Spray Truck (2.5 Ton)	1	LBFO	2021	√	20	2022	\$180,000										
2607	Dump Truck-OPP Trash Racks (convert 2609)	1	OPP	1981		40	2022	\$40,000										
							Total		\$ 242,000	\$ 317,800	\$ 194,000	\$ -	\$ 160,000	\$ 257,000	\$ 135,000	\$ -	\$ 178,500	\$ -
√	- Emissions regulated by California Air Resources Board (Off Road has bold font)							# of Equipment Replaced	2	2	3	0	2	1	0	0	1	0
	- Currently CARB Compliant							3% Inflation Factor per Year	\$ 7,260	\$ 19,354	\$ 17,989	\$ -	\$ 25,484	\$ 49,871	\$ 31,033	\$ -	\$ 54,402	\$ -
							Yearly Total	\$ 249,300	\$ 337,200	\$ 212,000	\$ -	\$ 185,500	\$ 306,900	\$ 166,000	\$ -	\$ 232,900	\$ -	

**Grand Total \$ 1,689,800**

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

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

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***Project No.:*** V1999002

***Segment Code:*** D1-2023

***Priority:*** B-6-c

***Facility:*** ALL

***Project Lead:*** CSUPT

***Project Title:*** Vehicle Replacement (Reserve Fund)

***Estimated Total Cost:*** \$128,400.00

***Labor:*** \$0   ***Materials:*** \$0   ***Equipment:*** \$0   ***Contract Costs:*** \$128,400

***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.



**San Luis & Delta-Mendota Water Authority  
Vehicle Replacement 10 Year Plan  
FY2023 Frontline Vehicles**

Veh No.	FRONT LINE VEHICLE DESCRIPTION	2022	Vehicle User	Model Year	Assigned To:	B	C	D	E					2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
						Est. MILEAGE ON 3/1/2022	Average Miles Per Year	Calculated Years to Replacement (150K or 15 yrs) <sup>1,2</sup>	Calculated FY for Replacement (Mileage or Age)	Est. Mileage at Replacement	Proposed FY for Replacement	Estimated Replacement Cost (FY2019\$)	To be reviewed each year										
					Current Calendar Year (CCY) =	2022	B ÷ (CCY - A)	(150K-B) ÷ C or 15 yrs	Current FY+D or A + 15 yrs	B + (E-Current FY) x C													
8129	1/2 Ton Ext Cab 4X4 <sup>2</sup>		P. Nacci	2017	LBFO Canal Operations	145,000	36,250	0	2022	145,000	2023	\$33,000	\$33,000						\$33,000				
8122	1/2 Ton Pickup <sup>2</sup>		K. Silva	2017	TFO Canal Operations	122,000	30,500	0	2022	122,000	2023	\$27,500	\$27,500						\$27,500				
8123	1/2 Ton Pickup <sup>2</sup>		Rodney Huff	2017	LBFO Canal Operations	135,000	33,750	0	2022	135,000	2023	\$27,500	\$27,500						\$27,500				
8119	1/2 Ton Ext Cab 4X4 <sup>2</sup>		Walsh	2017	LBFO Eng. HT3	128,000	32,000	0	2022	128,000	2023	\$33,000	\$33,000						\$33,000				
8107	3/4 Ton Pickup w/Utility Body <sup>2</sup>		J. Weisenberger	2016	TFO Canal Operations	112,000	22,400	2	2024	134,400	2024	\$40,000		\$40,000							\$40,000		
8120	Mid Sized Sedan		S. Davis	2017	IT	104,000	26,000	2	2024	130,000	2024	\$26,500		\$26,500									
8124	1/2 Ton Pickup		J. Oxenrider	2017	Operations Supervisor	94,000	23,500	3	2025	117,500	2024	\$27,500		\$27,500									
8086	1/2 Ton Pickup		R. Nazabel	2012	TFO Civil Maint.Foreman	109,000	12,111	4	2026	121,111	2024	\$27,500		\$27,500									
8108	Small SUV		Jamie M	2016	Engineering Manager	115,000	23,000	2	2024	138,000	2024	\$30,000		\$30,000									
8146	1/2 Ton Pickup <sup>2</sup>		S. Posey	2018	LBFO Canal Operations	91,400	30,467	1	2023	121,867	2024	\$27,500		\$27,500							\$27,500		
8091	Small SUV		Frank R	2013	Safety Engineer	92,000	11,500	8	2028	115,000	2025	\$30,000			\$30,000								
8033	3/4 Ton Pickup		J. Miller	2006	JPP Machine Shop	78,200	5,213	14	2021	88,627	2025	\$28,500			\$28,500								
8073	3/4 Ton 4x4 Pickup		P. Fagundes	2011	TFO Civil Maint.	82,500	8,250	9	2026	99,000	2025	\$32,000			\$32,000								
8069	3/4 Ton Pickup		Equip. Oper	2010	TFO Civil Maint.	92,000	8,364	7	2025	108,727	2025	\$28,500			\$28,500								
8131	1/2 Ton Pickup		C. Lee	2018	Watermaster	58,000	19,333	5	2027	96,667	2025	\$27,500			\$27,500								
8141	1/2 Ton Pickup		R. Martin	2018	LBFO Canal Operations	83,000	27,667	3	2025	138,333	2025	\$27,500			\$27,500						\$27,500		
8105	1 Ton Utility Truck-Diesel		CMLB	2014	LBFO Civil Maint.	98,000	14,000	4	2026	140,000	2026	\$60,000			\$60,000								
8143	1/2 Ton Pickup. 4WD. Crew Cab		P. Stearns	2019	Operations Manager	52,000	26,000	4	2026	130,000	2026	\$33,000			\$33,000								
8062	1/2 Ton Pickup		J. Amaya	2009	TFO Electric Shop	90,000	7,500	8	2024	112,500	2026	\$27,500			\$27,500								
8153	Mid Size SUV		F. Barajas	2020	Exec. Director	20,000	20,000	7	2029	80,000	2026	\$39,000			\$39,000							\$39,000	
8147	3/4 Ton Pickup w/Utility Body <sup>2</sup>		M. Costa	2019	LBFO Canal Operations	56,000	28,000	2	2024	140,000	2026	\$40,000			\$40,000						\$40,000	\$40,000	
8118	1/2 Ton Pickup		Engineering	2017	Mechanical Engineer	67,000	16,750	5	2027	134,000	2027	\$27,500										\$27,500	
8061	1 Ton Pickup w/Utility Body		JPP	2009	JPP Machine Shop	17,500	1,458	15	2024	23,333	2027	\$46,000			\$46,000								
8081	Small SUV		Savan	2012	SCADA Integrator	57,000	6,333	15	2027	82,333	2027	\$30,000			\$30,000								
8110	3/4 Ton Pickup w/Utility Body		A. Jorge	2016	LBFO Civil Maint	78,000	15,600	5	2027	140,400	2027	\$40,000			\$40,000								
8103	3/4 Ton Pickup. 4WD		Robert Huff	2014	LBFO Civil Maint	96,000	13,714	4	2026	150,857	2027	\$32,000			\$32,000								
8142	Small SUV		S.Petersen	2019	Water Policy Director	30,000	15,000	8	2030	105,000	2028	\$25,000							\$25,000				
8137	3/4 Ton Pickup w/Flat Bed (Spray Truck)		CMLB	2018	LBFO Civil Maint.	45,000	15,000	7	2029	135,000	2029	\$34,000											
8139	1 Ton Pickup w/Utility Body - Diesel		CMT	2018	TFO Civil Maint.	45,000	15,000	7	2029	135,000	2029	\$60,000									\$60,000		
8140	1 Ton Pickup w/Utility Body - Diesel		CMLB	2018	LBFO Civil Maint.	46,000	15,333	7	2029	138,000	2029	\$60,000									\$60,000		
8144	Small SUV		SGMA	2019	Civil Engineer-Ground Water	40,000	20,000	6	2028	180,000	2030	\$30,000									\$30,000		
8111	1 Ton Pickup w/Utility Body		R. Bertao	2016	LBFO Civil Maint	24,000	4,800	15	2031	57,600	2030	\$45,000									\$45,000		
8106	1 Ton Utility Truck - Diesel		T. Romero	2014	TFO Civil Maint.	24,000	3,429	15	2029	48,000	2030	\$60,000									\$60,000		
8149	1 Ton Pickup w/Utility Body - Diesel		CMT	2019	TFO Civil Maint.	32,000	16,000	8	2030	160,000	2031	\$60,000								\$60,000			
8158	1/2 Ton Pickup		B. Soares	2020	LBFO Civil Maint.	16,000	16,000	9	2031	96,000	2028	\$27,500									\$27,500		
8156	3/4 Ton Pickup w/Utility Body <sup>2</sup>		L. Simonich	2020	TFO Canal Operations	9,000	9,000	3	2025	36,000	2026	\$40,000							\$40,000				
8159	Mid Sized SUV <sup>1</sup>		Bob M	2020	Facility Manager	18,000	18,000	8	2030	90,000	2027	\$39,000											
8161	3/4 Ton Pickup		M. Garcia	2020	LBFO Civil Maint.	6,000	6,000	15	2035	60,000	2032	\$27,000											
8164	Mid Sized SUV		J. Bejarano	2021	Engineering	10,000	10,000	14	2036	100,000	2032	\$32,000							\$30,000				
8165	Sedan		P. Arroyave	2021	COO	15,000	15,000	9	2031	75,000	2027	\$30,000							\$30,000				
2601	3/4 Ton Pickup		JPP	2001	JPP Machine Shop	75,000	3,750	15	2016	71,250	2022	\$24,000											
2606	3/4 Ton Pickup w/Utility Body		M. Izoco	2002	Oneill PP	62,000	3,263	15	2017	58,737	2022	\$40,000											
8035	3/4 Ton Pickup w/Utility Body		ESHOP	2006	TFO Electric Shop	79,000	5,267	14	2021	73,733	2022	\$40,000											
8034	3/4 Ton Pickup w/Utility Body		ESHOP	2006	TFO Electric Shop	80,000	5,333	14	2021	74,667	2022	\$40,000											
8098	Minivan-Service Van		Y. Suarez	2013	OPP C&I	31,600	3,950	15	2028	27,650	2022	\$26,000											

- Notes:
- Exec. Director & COO 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.

	Total	\$ 121,000	\$ 179,000	\$ 174,000	\$ 199,500	\$ 275,500	\$ 206,000	\$ 247,500	\$ 170,000	\$ 79,000	\$ -
	# of Vehicles Replaced	4	6	6	5	8	6	5	5	2	0
	3% Inflation Factor per Year	\$ 7,369	\$ 10,901	\$ 16,134	\$ 25,039	\$ 43,880	\$ 39,975	\$ 56,894	\$ 45,351	\$ 24,077	\$ -
	Total Dollar Amount	\$ 128,400	\$ 190,000	\$ 190,200	\$ 224,600	\$ 319,400	\$ 246,000	\$ 304,400	\$ 215,400	\$ 103,100	\$ -
	<b>Grand Total</b>										<b>\$ 1,793,100</b>

NOTE: Vehicle replacement costs rounded up to the nearest \$500.



	How Often (Yrs)	Est. Cost (x1000) in 2014\$	Year Last Performed	Forecasted Years	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
<b>Tracy Field Office Facilities</b>					\$ 46	\$ 52	\$ 77	\$ 43	\$ 16	\$ -	\$ 50	\$ -	\$ 45	\$ 21
<b>Entire O&amp;M Compound</b>					\$ 46	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50	\$ -	\$ 45	\$ -
<b>Asphalt Pavement Areas</b>					\$ 46	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50	\$ -	\$ -	\$ -
Seal Coat Surfacing & Striping (incl USBR Lot)	5	41	2017	2022	\$ 46						\$ 50			
<b>Alarm &amp; Security Systems</b>					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fire Alarm System Replacement	30	20	2011	2041										
Security System Replacement	20	25	2012	2032										
<b>Wash Water Recycling System</b>					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Recycling System Replacement	20	75	1996	2016										
<b>Aboveground Fuel Storage System</b>					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 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	
<b>Control Building (70 Years Old)</b>					\$ -	\$ 15	\$ -	\$ -	\$ 10	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Roofing Systems</b>					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roof Re-seal/Overlay/Replacement	20	15	2021	2041										
<b>Building Interior/Exterior Components</b>					\$ -	\$ 15	\$ -	\$ -	\$ 10	\$ -	\$ -	\$ -	\$ -	\$ -
Interior Maintenance (Painting)	20	10	2007	2027					\$ 10					
Kitchen Remodel	25	15	1980	2005		\$ 15								
Flooring Replacement (Carpet/Tile)	20	15	2007	2027										
<b>Building HVAC</b>					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Heater System Replacement	20	10	2011	2031										
Air Conditioning System Replacement	20	30	2011	2031										
Ventilation System Replacement	20	10	2011	2031										
<b>Warehouse Building (26 Years Old)</b>					\$ -	\$ 20	\$ 27	\$ 18	\$ 6	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Roofing Systems</b>					\$ -	\$ -	\$ 27	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roof Repair/Replacement	25	25	1996	2021			\$ 27							
<b>Building Interior/Exterior Components</b>					\$ -	\$ 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								
<b>Building HVAC</b>					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Heater System Replacement	20	15	1996	2016										
Air Conditioning System Replacement	20	18	1996	2016										
Ventilation System Replacement	20	10	1996	2016										
<b>Building Fire Protection System</b>					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Component Replacement (Sprinklers & Detectors)	50	10	1996	2046										

	How Often (Yrs)	Est. Cost (x1000) in 2014\$	Year Last Performed	Forecasted Years	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
<b>Adminstration/Electric Shop Building (26 Years Old)</b>					\$ -	\$ 17	\$ 25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Roofing Systems</b>					\$ -	\$ -	\$ 25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roof Repair/Replacement	25	25	1996	2021			\$ 25							
<b>Building Interior/Exterior Components</b>					\$ -	\$ 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										
<b>Building HVAC</b>					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Heater System Replacement	20	35	1996	2016										
Air Conditioning System Replacement	20	35	1996	2016										
Ventilation System Replacement	20	20	1996	2016										
<b>Building Fire Protection System</b>					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Component Replacement (Sprinklers & Detectors)	50	10	1996	2046										
<b>Civil/Vehicle Maintenance Building (26 Years Old)</b>					\$ -	\$ -	\$ 25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Roofing Systems</b>					\$ -	\$ -	\$ 25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roof Repair/Replacement	25	25	1996	2021			\$ 25							
<b>Building Interior/Exterior Components</b>					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Exterior Maintenance (Painting)	40	15	1996	2036										
Interior Maintenance (Painting)	20	10	2014	2034										
Flooring Replacement (Tile)	25	20	2020	2045										
<b>Building HVAC</b>					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Heater System Replacement	20	10	1996	2016										
Air Conditioning System Replacement	20	10	1996	2016										
Shop Ventilation System Replacement	20	10	1996	2016										
<b>Building Fire Protection System</b>					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Component Replacement (Sprinklers & Detectors)	50	10	1996	2046										
<b>Sandblast and Paint Building (20 Years Old)</b>					\$ -	\$ -	\$ -	\$ 25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 21
<b>Roofing Systems</b>					\$ -	\$ -	\$ -	\$ 25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roof Repair/Replacement	25	25	2002	2027				\$ 25						
<b>Building Interior/Exterior Components</b>					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Exterior Maintenance (Painting)	40	15	2002	2042										
<b>Blast Room Air Flow System</b>					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 21
Filter Replacement	10	15	2022	2032										\$ 21
Air Compressor Replacement	20	50	2022	2042										
Shop Ventilation System Replacement	20	50	2022	2042										
Media Collection System	20	75	2022	2042										
<b>Building Fire Protection System</b>					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Component Replacement (Sprinklers & Detectors)	30	10	2002	2032										

	How Often (Yrs)	Est. Cost (x1000) in 2014\$	Year Last Performed	Forecasted Years	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
<b>Los Banos Field Office &amp; Maintenance Facility</b>					\$ -	\$ 77	\$ -	\$ 37	\$ -	\$ 87	\$ -	\$ 25	\$ 45	\$ -
<b>Entire O&amp;M Compound</b>					\$ -	\$ 77	\$ -	\$ -	\$ -	\$ 45	\$ -	\$ 25	\$ 45	\$ -
<b>Asphalt Pavement Areas</b>					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25	\$ -	\$ -
Seal Coat Surfacing & Striping (2009)	10	20	2019	2029								\$ 25		
<b>Alarm &amp; Security Systems</b>					\$ -	\$ -	\$ -	\$ -	\$ -	\$ 45	\$ -	\$ -	\$ -	\$ -
Fire Alarm System Replacement (2008)	20	20	2008	2028						\$ 20				
Security System Replacement (2008)	20	25	2008	2028						\$ 25				
<b>Domestic Water Well</b>					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Well Replacement	25	150	2021	2046										
<b>Wash Water Recycling System</b>					\$ -	\$ 77	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Recycling System Replacement (2004)	20	75	2004	2024		\$ 77								
<b>Aboveground Fuel Storage System</b>					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 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	
<b>Office Building (15 Years Old)</b>					\$ -	\$ -	\$ -	\$ 37	\$ -	\$ 42	\$ -	\$ -	\$ -	\$ -
<b>Roofing Systems</b>					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roof Repair/Replacement (2008)	25	25	2008	2033										
<b>Building Interior/Exterior Components</b>					\$ -	\$ -	\$ -	\$ 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						
<b>Building HVAC</b>					\$ -	\$ -	\$ -	\$ -	\$ -	\$ 42	\$ -	\$ -	\$ -	\$ -
Heater System Replacement (2008)	20	20	2008	2028						\$ 20				
Air Conditioning System Replacement (2008)	20	20	2008	2028						\$ 22				
<b>Los Banos Administration Office Facility</b>					\$ -	\$ -	\$ -	\$ -	\$ 10	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Office Building</b>					\$ -	\$ -	\$ -	\$ -	\$ 10	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Offices</b>					\$ -	\$ -	\$ -	\$ -	\$ 10	\$ -	\$ -	\$ -	\$ -	\$ -
Interior Maintenance (Painting)	20	15	2000	2020										
Office Partition Replacement	20	10	2008	2028					\$ 10					
Flooring Replacement (Carpet/Tile)	20	25	2000	2020										
<b>Alarm &amp; Security Systems</b>					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Security Alarm System Replacement	20	10	2000	2020										
<b>Building Plumbing System</b>					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Kitchen/Lunchroom Remodel	20	18	1992	2012										
<b>TOTALS (x \$1000)</b>					\$ 46	\$ 129	\$ 77	\$ 80	\$ 26	\$ 87	\$ 50	\$ 25	\$ 90	\$ 21
<b>3% Inflation Factor per Year (x \$1000)</b>					\$ 1	\$ 8	\$ 7	\$ 10	\$ 4	\$ 17	\$ 11	\$ 7	\$ 27	\$ 7
<b>Yearly Total (x \$1000)</b>					\$ 47	\$ 136	\$ 84	\$ 90	\$ 30	\$ 104	\$ 61	\$ 32	\$ 117	\$ 28
													<b>10 Year Grand Total</b>	<b>\$ 731</b>

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

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***Project No.:*** E2000004

***Segment Code:*** D0-2023

***Priority:*** C-6-b

***Facility:*** ALL

***Project Lead:*** NETW

***Project Title:*** Replace Computer/Network Communication Equip (Reserve Fund)

***Estimated Total Cost:*** \$149,200.00

***Labor:*** \$0    ***Materials:*** \$149,200    ***Equipment:*** \$0    ***Contract Costs:*** \$0

***Project Description and Scope:***

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

***Project Purpose and Background***

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.

***Project Status:***

Reserve Fund

**SAN LUIS DELTA-MENDOTA WATER AUTHORITY**  
**10-Year Network/Information Systems Equipment Replacement Plan**

	No. in Use	Life-span (in years)	No. per Year	Cost EA	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	TOTAL
<b>Computers &amp; Peripherals</b>															
Computers - workstations	38	5	Note 1	\$1,800	\$5,400	\$5,400	\$5,400	\$5,400	\$46,800	\$5,400	\$5,400	\$5,400	\$5,400	\$46,800	\$136,800
Computers - laptops	27	4/5		\$2,700	\$8,100	\$29,700	\$24,300	\$2,700	\$13,500	\$27,000	\$24,300	\$5,400	\$9,000	\$29,700	\$173,700
Plotter	1	10	Note 12	\$15,000	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$17,000	\$22,000
Monitors	69	7	Note 2	\$350	\$1,050	\$1,050	\$7,000	\$7,000	\$7,000	\$1,050	\$1,050	\$1,050	\$1,050	\$7,000	\$34,300
Servers	8	5	Note 3		\$48,000	\$8,000	\$25,500	\$15,000	\$0	\$48,000	\$8,000	\$25,500	\$20,000	\$15,000	\$213,000
Switches	12	5	Note 4		\$15,000	\$0	\$0	\$0	\$0	\$15,000	\$0	\$0	\$5,000	\$15,000	\$50,000
Backup System	3	5	Note 5		\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$30,000	\$0	\$50,000
Anti-virus/spam software/image software	125	3	Note 6	\$70	\$0	\$8,750	\$0	\$0	\$8,750	\$0	\$0	\$8,750	\$0	\$0	\$26,250
Firewall	2	5	Note 7		\$11,000	\$0	\$0	\$4,000	\$0	\$11,000	\$0	\$0	\$6,000	\$0	\$32,000
<b>SCADA computer/network equipment</b>															
Computer - workstations	3	5	Note 8	\$2,300	\$4,600	\$0	\$0	\$0	\$2,300	\$4,600	\$0	\$0	\$0	\$5,000	\$16,500
Computer - mission critical workstns	2	5		\$6,000	\$0	\$0	\$6,000	\$6,000	\$0	\$0	\$0	\$6,000	\$7,000	\$0	\$25,000
Workstation with Monitors	2	5		\$3,500	\$0	\$0	\$0	\$7,000	\$0	\$0	\$0	\$0	\$8,000	\$0	\$15,000
Servers	2	5		\$5,500	\$0	\$0	\$0	\$11,000	\$0	\$0	\$0	\$0	\$14,000	\$0	\$25,000
Laptops	2	4		\$2,700	\$0	\$0	\$5,500	\$0	\$0	\$0	\$5,500	\$0	\$0	\$5,500	\$16,500
Switches	4	5			\$0	\$0	\$3,500	\$0	\$0	\$0	\$0	\$3,500	\$0	\$0	\$7,000
Firewall	2	5			\$0	\$300	\$0	\$1,000	\$0	\$0	\$300	\$0	\$0	\$0	\$1,600
Security Monitors (42")	3	4		\$1,000	\$0	\$0	\$3,000	\$0	\$0	\$0	\$3,000	\$0	\$1,000	\$3,000	\$10,000
<b>Office Equipment</b>															
Copiers	6	4-7	Note 9		\$6,000	\$22,000	\$0	\$12,000	\$0	\$28,000	\$0	\$6,000	\$0		\$74,000
Fax Machines	4	10	Note 10		\$0	\$0	\$0	\$1,500	\$0	\$0	\$0	\$0	\$1,500	\$0	\$3,000
Phone System	4	15	Note 11		\$45,000	\$0	\$0	\$0	\$0	\$15,000	\$10,000	\$15,000	\$15,000	\$45,000	\$145,000
<b>Other Equipment</b>															
Fuel System	1	10			\$0	\$0	\$35,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35,000
				<b>TOTAL</b>	<b>\$149,150</b>	<b>\$75,200</b>	<b>\$115,200</b>	<b>\$92,600</b>	<b>\$78,350</b>	<b>\$155,050</b>	<b>\$57,550</b>	<b>\$76,600</b>	<b>\$122,950</b>	<b>\$189,000</b>	<b>\$1,111,650</b>
				<b>Annual Cost</b>											<b>\$111,165</b>
Note 1: The replacement of 3 PCs per year is predicated on a PC life span of 5 years. Every fifth year, 26 computers will require replacement. The cost of \$1,800 per PC includes software for the workstation (e.g. MS Windows 10 & MS Office).															
Note 2: Replace flat panel monitors as needed.															
Note 3: Replace storage server in 2021. Replace mail, file, & sql servers in 2023. The amounts include the operating system software and client access licenses.															
Note 4: All switches will be replaced at the same time.															
Note 5: Replace backup systems at LBAO, Tracy and Sacramento; includes hardware, software, external drives, and technical support.															
Note 6: Support & upgrades are purchased every three years due to the cost savings but not for longer due to the changes in technology.															
Note 7: Purchase 2-year support/update contract in 2021 and replace hardware with 3-year software support/updates in 2023.															
Note 8: This section consists of a servers, switches, PCs, monitors & laptops with varying life cycles for the SCADA network.															
Note 9: Replace Warehouse copier in 2021 and LBFO copier in 2023.															
Note 10: Replace the TAO fax in 2021.															
Note 11: Replace the Tracy phone system in 2023.															
Note 12: Plotter prices increased over 10 yrs and includes extended warranty															

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

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**Project No.:** E1999001

**Segment Code:** F4-2023

**Priority:** B-3-a

**Facility:** JPP

**Project Lead:** EENG

**Project Title:** Unit Rewind - Phase 6 (U4 & U3)

**Estimated Total Cost:** \$4,047,200.00

**Labor:** \$550,000    **Materials:** \$0    **Equipment:** \$0    **Contract Costs:** \$3,497,200

**Project Description and Scope:**

The scope of this phase is to perform the unit rewind work on the final two units (Finish the remaining work on Unit 4 and the complete rewind of Unit 3). Prior to the contract work on each unit, the SLDMWA staff will disassemble the unit. The contractor will then take possession of the unit for the rewind work. The contractor's rewind work includes the following: manufacture new stator coils, stator laminations and vents. Remove and dispose of the existing stator components down to the stator frame. Reinstall the new stator laminations, vents, coils per the contract requirements. Upon completion of the rewind, the contractor will return possession of the unit to the SLDMWA for reassembly. After the completion of the reassembly, the unit is tested to confirm the unit performance meets the contract performance requirements. The contract will be closed out and all as-built drawings and spare parts will be provided to the SLDMWA.

FUNDING NOTE: The cost for Unit 4 is financed with Public Bond funds and the cost for Unit 3 is financed through a Repayment Agreement between the SLDMWA and the USBR.

**Project Purpose and Background**

The six (6) motors 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. Based on the data collected during the condition assessment, a rewind order was developed. The recommended rewind priority order is as follows: Unit 6, 2, 5, 1, 4, & 3. 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.

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:**

FY2018 - FY2021 - Rewind work completed on Units 6, 2, 5 respectively.

FY2022 - Rewind of Unit 1 in progress. Rewind of Unit 4 will begin in November, 2021

FY2023 - Awaiting approval - Unit 4 & 3 (Unit 4 financed with Public Bond and Unit 3 financed by USBR)